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DANGEROUS WASTE PORTION OF THE RESOURCE
CONSERVATION AND RECOVERY ACT PERMIT
FOR THE TREATMENT, STORAGE, AND DISPOSAL
OF DANGEROUS WASTE

Department of Ecology
Nuclear Waste Program
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Issued in accordance with the applicable provisions of the Hazardous Waste Management Act, Chapter 70.105 RCW, and the regulations promulgated thereunder in Chapter 173-303 WAC.

ISSUED TO:

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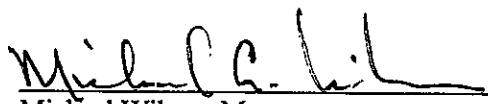
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This Permit, as modified on August 29, 1995, is effective as of September 28, 1995, and shall remain in effect through September 27, 2004, unless revoked and reissued under WAC 173-303-830(3), terminated under WAC 173-303-830(5), or continued in accordance with WAC 173-303-806(7).

ISSUED BY: WASHINGTON STATE DEPARTMENT OF ECOLOGY


Michael Wilson, Manager
Nuclear Waste Program
Department of Ecology

Date: 8/29/95

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LIST OF ATTACHMENTS

The following listed documents are attached in their entirety. However, only those portions of the Attachments specified in Parts I through V are enforceable Conditions of this Permit and subject to the Permit modification requirements of Condition I.C.3. Changes to portions of the Attachments which are not subject to the Permit modification process shall be addressed in accordance with Conditions I.E.8., I.E.11., I.E.13., I.E.15. through I.E.20., and I.E.22. The Department has, as deemed necessary, modified specific language in these Attachments. These modifications are described in the Conditions (Parts I through V), and thereby supersede the language of the Attachment.

Attachment 1	Hanford Federal Facility Agreement and Consent Order, (As Amended)
Attachment 2	Hanford Facility Legal Description
Attachment 3	Permit Applicability Matrix
Attachment 4	Hanford Facility Contingency Plan, Revision 1, June 1993
Attachment 5	Purgewater Management Plan, July 1990
Attachment 6	Hanford Well Remediation and Decommissioning Plan, Revision 0
Attachment 7	Policy on Remediation of Existing Wells and Acceptance Criteria for RCRA and CERCLA, June 1990
Attachment 8	616 Nonradioactive Dangerous Waste Storage Facility Part A & Part B Permit Applications, Revision 2, September 1991
Attachment 9	616 Nonradioactive Dangerous Waste Shipping Lists
Attachment 10	616 Nonradioactive Dangerous Waste Facility Description of Procedures
Attachment 11	183-H Solar Evaporation Basins Closure/Postclosure Plan, Revision 3, June 1991
Attachment 12	Decommissioning Work Plan "Concrete Sampling - 183-H Solar Evaporation Basins" (DWP-H-080-00001) 8-26-91, Revision A-3
Attachment 13	Decommissioning Work Plan "Core Drill Sampling - 183-H Solar Evaporation Basins (Phase I)" (DWP-H-080-00005) 2-8-91, Revision A-1
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1		
2	Attachment 15	Decommissioning Work Plan "Berm Removal for 183-H Solar Evaporation
3		Basins" (DWP-H-026-00008) 1-16-91, Revision A-0
4		
5	Attachment 16	300 Area Solvent Evaporator Closure Plan, Revision 3b, September 1992
6		
7	Attachment 17	2727-S Nonradioactive Dangerous Waste Storage Facility Closure Plan,
8		Revision 3, January 1992
9		
10	Attachment 18	305-B Storage Facility Part A and Part B Permit Applications, Revision 2,
11		October 1992
12		
13	Attachment 19	Simulated High Level Waste Slurry TSD Closure Plan
14		
15	Attachment 20	218-E-8 Borrow Pit Demolition Site Closure Plan
16		
17	Attachment 21	200 West Ash Pit Demolition Site Closure Plan
18		
19	Attachment 22	2101-M Pond Closure Plan
20		
21	Attachment 23	216-B-3 Expansion Ponds Closure Plans
22		
23	Attachment 24	Hanford Patrol Academy Demolition Site Closure Plan
24		
25	Attachment 25	105-DR Large Sodium Fire Facility Closure Plan
26		
27	Attachment 26	304 Concretion Facility Closure Plan
28		
29	Attachment 27	Permit Modification Schedule

INTRODUCTION

Pursuant to Chapter 70.105 Revised Code of Washington (RCW), the Hazardous Waste Management Act (HWMA) of 1976, as amended, Chapter 70.105D RCW, the Model Toxics Control Act, and regulations promulgated thereunder by the Washington State Department of Ecology (hereafter called the Department), codified in Chapter 173-303 Washington Administrative Code (WAC), Dangerous Waste Regulations, a Dangerous Waste Permit is issued to the U.S. Department of Energy - Richland Operations Office (DOE-RL), (owner/operator), and its contractors (Westinghouse Hanford Company (Westinghouse Hanford) (co-operator), Pacific Northwest Laboratory (PNL) (co-operator), and Bechtel Hanford, Incorporated (BHI) (co-operator)) (hereafter called the Permittees), for the treatment, storage, and disposal of dangerous waste at the Hanford Facility.

This Dangerous Waste Permit, issued in conjunction with the U.S. Environmental Protection Agency's, (hereafter call the Agency) Hazardous and Solid Waste Amendments Portion of the Resource Conservation and Recovery Act Permit for the Treatment, Storage, and Disposal of Hazardous Waste (HSWA Permit), constitutes the Resource Conservation and Recovery Act Permit (RCRA Permit) for the Hanford Facility. Use of the term "Permit" within the Dangerous Waste Permit shall refer to the Dangerous Waste Permit while use of the term "Permit" within the HSWA Permit shall refer to the HSWA Permit. Use of the same term in both the Dangerous Waste Permit and the HSWA Permit, shall have the standard meaning associated with the activities addressed by the Permit in which the term is used. Such meanings shall prevail except where specifically stated otherwise.

The Permittees shall comply with all terms and Conditions set forth in this Permit and those portions of the Attachments that have been specifically incorporated into this Permit. When the Permit and the Attachments (except Attachment 1) conflict, the wording of the Permit will prevail. The Permit is intended to be consistent with the terms and conditions of the Hanford Federal Facility Agreement and Consent Order (FFACO, Attachment 1). The Permittees shall also comply with all applicable State regulations, including Chapter 173-303 WAC.

Applicable state regulations are those which are in effect on the date of issuance, or as specified in subsequent modifications of this Permit. In addition, applicable State regulations include any self-implementing statutory provisions and related regulations which, according to the requirements of the HWMA, as amended, or other law(s), are automatically applicable to the Permittees' dangerous waste management activities, notwithstanding the Conditions of this Permit.

This Permit is based upon the administrative record, as required by WAC 173-303-840. The Permittees' failure in the application or during the Permit issuance process to fully disclose all relevant facts, or the Permittees' misrepresentation of any relevant facts at any time, shall be grounds for the termination or modification of this Permit and/or initiation of an enforcement action, including criminal proceedings. The Permittees shall inform the Department of any deviation from Permit Conditions or changes in the information on which the application is based which would affect either the Permittees' ability to comply or actual compliance with the applicable regulations or Permit Conditions or which alters any Condition of this Permit in any way.

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1 The Department shall enforce all Conditions of this Permit for which the State of Washington is
2 authorized, or which are "state-only" provisions (i.e., Conditions broader in scope or more stringent
3 than the Federal RCRA program). Any challenges of any Permit Condition may be appealed in
4 accordance with WAC 173-303-845. In the event that any Permit Condition is challenged by any
5 Permittee under WAC 173-303-845, the Department may stay any such Permit Condition as it pertains
6 to all Permittees in accordance with the same terms of any stay it grants to the challenging Permittee.
7 If such a stay is granted, it will constitute a "stay by the issuing agency" within the meaning of RCW
8 43.21B.320(1).
9

10 This Permit has been developed to allow a step-wise permitting process of the Hanford Facility to
11 ensure the proper implementation of the FFACO. In order to accomplish this, this Permit consists of
12 five (5) Parts.
13

14 **Part I, Standard Conditions**, contains Conditions which are similar to those appearing in all
15 dangerous waste permits.
16

17 **Part II, General Facility Conditions**, combines typical dangerous waste Permit Conditions with those
18 Conditions intended to address issues specific to the Hanford Facility. Where appropriate, the General
19 Facility Conditions apply to all final status dangerous waste management activities at the Facility.
20 Where appropriate, the General Facility Conditions also address dangerous waste management
21 activities which may not be directly associated with distinct treatment, storage, and disposal (TSD)
22 units or which may be associated with many TSD units (i.e., spill reporting, training, contingency
23 planning, etc.).
24

25 **Part III, Unit-Specific Conditions for Operating Units**, contains those Permit requirements which
26 apply to each individual TSD unit operating under final status. Conditions for each TSD unit are
27 found in a Chapter dedicated to that TSD unit. These unit-specific Chapters contain references to
28 Standard and General Conditions (Parts I and II), as well as additional requirements which are intended
29 to ensure that each TSD unit is operated in an efficient and environmentally protective manner.
30

31 **Part IV, Corrective Actions for Past Practice**, references the Agency's HSWA Permit. The HSWA
32 Permit contains those requirements that apply to the identification of Solid Waste Management Units
33 (SWMUs) at the Facility and conduct of investigations and remediations at such SWMUs. The
34 HSWA Permit addresses both SWMUs that are located on the USDOE managed portions of the
35 Facility as well as SWMUs which are not located on USDOE managed property (i.e., leased lands).
36 Any SWMUs located on USDOE managed property are, or will be, included in the FFACO and
37 assigned to operable units. The processes and procedures to be followed, and the schedules of
38 compliance for investigation and subsequent remediation, will be contained in the FFACO. SWMUs
39 not located on USDOE managed property will undergo investigations and remediations, as necessary,
40 in accordance with the requirements and schedules identified in the HSWA Permit.
41

42 It is intended that, once the Department receives authorization from the Agency to implement the
43 Corrective Action provisions, these requirements will be incorporated into this Part through a Permit

1 modification. Until the Department receives authorization for the Corrective Action provisions of
2 RCRA, the Agency shall maintain regulatory lead for these requirements.

3
4 **Part V, Unit-Specific Conditions for Units Undergoing Closure**, contains those requirements which
5 apply to those specific TSD units included in this Part that are undergoing closure. In accordance with
6 Section 5.3. of the Action Plan of the FFACO, all TSD units that undergo closure, irrespective of
7 permit status, shall be closed pursuant to the authorized State Dangerous Waste Program in
8 accordance with WAC 173-303-610. Requirements for each TSD unit undergoing closure are found in
9 a Chapter dedicated to that TSD unit. These unit-specific Chapters contain references to Standard
10 Conditions (Part I) and General Conditions (Part II), as well as additional requirements which are
11 intended to ensure that each TSD unit is closed in an efficient and environmentally protective manner.
12

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DEFINITIONS

All definitions contained in the FFACO, May 1989, as amended, are hereby incorporated, in their entirety, by reference into this Permit, except that any of the definitions used below, (a) through (n) shall supersede any definition of the same term given in the FFACO. However, the Permit is intended to be consistent with the FFACO.

All definitions contained in WAC 173-303-040 are hereby incorporated, in their entirety, by reference into this Permit, except that any of the definitions used below, (a) through (n), shall supersede any definition of the same term given in WAC 173-303-040.

Where terms are defined in both Chapter 173-303 WAC and the FFACO, the definitions contained in Chapter 173-303 WAC shall supersede any definition of the same term given in the FFACO.

Where terms are not defined in the regulations, the Permit or the FFACO, the meaning associated with such terms shall be defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

As used in this Permit, words in the masculine gender also include the feminine and neuter genders, words in the singular include the plural, and words in the plural include the singular.

The following definitions apply throughout this Permit:

- a. The term "**Critical Systems**" as applied to determining whether a permit modification is required means those specific portions of a TSD unit's structure or equipment whose failure could lead to the release of dangerous waste into the environment and/or systems which include processes which treat, transfer, store or dispose of regulated wastes. A list identifying the critical systems of a specific TSD unit may be developed and included in Part III or Part V of this Permit. In developing a critical system list, or in the absence of a critical system list, WAC 173-303-830 modifications shall be considered.
- b. The term "**Contractor(s)**" means, unless specifically identified otherwise in this Permit or attachments, Westinghouse Hanford Company (Westinghouse Hanford), Pacific Northwest Laboratory (PNL), and Bechtel Hanford, Inc. (BHI).
- c. The term "**Dangerous Waste**" means those solid wastes designated under Chapter 173-303 WAC as dangerous or extremely hazardous waste. As used in the Permit, the word "dangerous waste" shall refer to the full universe of wastes regulated by Chapter 70.105 RCW and Chapter 173-303 WAC (including dangerous waste, hazardous waste, extremely hazardous waste, mixed waste and acutely hazardous waste).

- 1 d. The term "**Days**" means calendar days unless specifically identified otherwise. Any
2 submittal, notification, or recordkeeping requirement that would be due under the
3 Conditions of this Permit on a Saturday, Sunday, or federal or state holiday shall be
4 due on the following business day unless specifically specified otherwise in the Permit.
5
- 6 e. The term "**Department**" means the Washington State Department of Ecology, (with
7 the address as specified on page one (1) of this Permit).
8
- 9 f. The term "**Director**" means the Director of the Washington State Department of
10 Ecology or a designated representative. The Program Manager of the Nuclear Waste
11 Program (with the address as specified on page one of this Permit) is a duly authorized
12 and designated representative of the Director for purposes of this Permit.
13
- 14 g. The term "**Facility**" means all contiguous land, and structures, other appurtenances,
15 and improvements on the land used for recycling, reusing, reclaiming, transferring,
16 storing, treating, or disposing of dangerous waste. The legal and physical description
17 of the Facility is set forth in Attachment 2 of this Permit.
18
- 19 h. The term "**FFACO**" means the Hanford Federal Facility Agreement and Consent
20 Order, as amended.
21
- 22 i. The term "**RCRA Permit**" means the Dangerous Waste Portion of the RCRA Permit
23 for the Treatment, Storage, and Disposal of Dangerous Waste (Dangerous Waste
24 Permit) issued by the Washington State Department of Ecology, pursuant to Chapter
25 70.105 RCW and Chapter 173-303 WAC coupled with the HSWA Portion of the
26 RCRA Permit for the Treatment, Storage, and Disposal of Hazardous Waste (HSWA
27 Permit) issued by the EPA, Region 10, pursuant to 42 U.S.C. 6901 et seq. and 40
28 CFR Parts 124 and 270.
29
- 30 j. The term "**Permittees**" means the United States Department of Energy
31 (owner/operator), Westinghouse Hanford Company (co-operator), Bechtel Hanford,
32 Inc. (co-operator), and Pacific Northwest Laboratory (co-operator).
33
- 34 k. The term "**Raw Data**" means the initial value of analog or digital instrument outputs -
35 and/or manually recorded values obtained from measurement tools or personal
36 observation. These values are converted into reportable data (e.g., concentration,
37 percent moisture) via automated procedures and/or manual calculations.
38
- 39 l. The term "**Reasonable Times**" means normal business hours, hours during which
40 production, treatment, storage, construction, disposal or discharge occurs or times
41 when the Department suspects a violation requiring immediate inspection.
42
- 43 m. The term "**Significant Discrepancy**" in regard to a manifest or shipping paper means a
44 discrepancy between the quantity or type of dangerous waste designated on the

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1 manifest or shipping paper and the quantity or type of dangerous waste a TSD unit
2 actually receives. A significant discrepancy in quantity is a variation greater than ten
3 (10) percent in weight for bulk quantities (e.g., tanker trucks, railroad tank cars, etc.),
4 or any variation in piece count for nonbulk quantities (i.e., any missing container or
5 package would be a significant discrepancy). A significant discrepancy in type is an
6 obvious physical or chemical difference which can be discovered by inspection or
7 waste analysis (e.g., waste solvent substituted for waste acid).
8

- 9 n. The term "Unit" (or "TSD unit"), as used in Parts I through V of this Permit, means
10 the contiguous area of land on or in which dangerous waste is placed, or the largest
11 area in which there is a significant likelihood of mixing dangerous waste constituents
12 in the same area. A TSD unit, for purposes of this Permit, is a subgroup of the
13 Facility which has been identified in a Hanford Facility Dangerous Waste Part A
14 Permit Application Form 3.

ACRONYMS

1		
2		
3		
4	AGENCY	U. S. Environmental Protection Agency, Region X
5	APP	Used to Denote Appendix Page Numbers
6		
7	BHI	Bechtel Hanford, Inc.
8		
9	CERCLA	Comprehensive Environmental Response Compensation and Liability Act of
10		1980 (as Amended by the Superfund Reauthorization Act of 1986)
11	CFR	Code of Federal Regulations
12	CIP	Construction Inspection Plan
13	CLP	Contract Laboratory Program
14		
15	Department	Washington State Department of Ecology
16	DOE-RL	U. S. Department of Energy, Richland Operations Office
17		
18	EC	Emergency Coordinator
19	Ecology	Washington State Department of Ecology
20	ECN	Engineering Change Notice
21	EPA	U.S. Environmental Protection Agency
22		
23	FFACO	Hanford Federal Facility Agreement and Consent Order
24		
25	HSWA	Hazardous and Solid Waste Amendments of 1984
26	HWMA	Hazardous Waste Management Act
27		
28	MTCA	Model Toxics Control Act
29		
30	NCR	Nonconformance Report
31	616 NRDWSF	616 Nonradioactive Dangerous Waste Storage Facility
32		
33	OSWER	Office of Solid Waste and Emergency Response
34		
35	PNL	Pacific Northwest Laboratory
36		
37	QA	Quality Assurance
38	QAPP	Quality Assurance Project Plan
39	QC	Quality Control
40		
41	RCRA	Resource Conservation and Recovery Act of 1976
42	RCW	Revised Code of Washington
43		
44		

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1	SAP	Sampling and Analysis Plan
2	SARA	Superfund Amendments and Reauthorization Act of 1986
3	SOP	Standard Operating Procedure
4	SWMU	Solid Waste Management Unit
5		
6	TCLP	Toxicity Characteristic Leaching Procedure
7	TSD	Treatment, Storage, and/or Disposal
8		
9	USDOE	U.S. Department of Energy
10		
11	WAC	Washington Administrative Code
12	WAP	Waste Analysis Plan
13	Westinghouse	Westinghouse Hanford Company
14	Hanford	
15		

PART I - STANDARD CONDITIONS

I.A. EFFECT OF PERMIT

I.A.1.a. The Permittees are authorized to treat, store and dispose of dangerous waste in accordance with the Conditions of this Permit and in accordance with the applicable provisions of Chapter 173-303 WAC (including provisions of the Chapter as they have been applied in the FFACO). Any treatment, storage, or disposal of dangerous waste by the Permittees at the Facility that is not authorized by this Permit, or by WAC 173-303-400 (including provisions of this regulation as they have been applied in the FFACO) for those TSD units not subject to this Permit, and for which a permit is required by Chapter 173-303 WAC, is prohibited.

TSD units operating or closing under interim status shall maintain interim status until that TSD unit is incorporated into Part III or V of this Permit or until interim status is terminated under WAC 173-303-805(8). Interim status units shall be incorporated into this Permit through the Permit modification process.

I.A.1.b. The Conditions of this Permit shall be applied to the Facility as defined by the Permit Applicability Matrix (Attachment 3).

I.A.2. USDOE is responsible for activities which include, but are not limited to, the overall management and operation of the Facility.

Westinghouse Hanford is identified as a Permittee for activities subject to the Conditions of this Permit where its agents, employees, or subcontractors have operational and/or management responsibilities and control.

PNL is identified as a Permittee for activities subject to the Conditions of this Permit where its agents, employees, or subcontractors have operational and/or management responsibilities and control.

BHI is identified as a Permittee for activities subject to the Conditions of this Permit where its agents, employees, or subcontractors have operational and/or management responsibilities and control.

I.A.3. Coordination With The FFACO

Each TSD unit shall have an application for a final status permit or closure/postclosure plan submitted to the Department in accordance with the schedules identified in the FFACO (Milestone M-20-00). After completion of the permit application or closure plan review, a final permit decision will be made pursuant to WAC 173-303-840. Specific conditions for each TSD unit shall be incorporated into

1 this Permit in accordance with the Class 3 permit modification procedure identified in
2 Condition I.C.3., at the time identified in the five year Permit Modification Schedule in
3 Attachment 27.

4
5 I.B. PERSONAL AND PROPERTY RIGHTS

6
7 This Permit does not convey property rights of any sort or any exclusive privilege; nor
8 does it authorize any injury to persons or property, or any invasion of other private
9 rights, or any violation of Federal, State, or local laws or regulations.

10
11 I.C. PERMIT ACTIONS

12
13 I.C.1. Modification, Revocation, Reissuance, or Termination

14
15 This Permit may be modified, revoked and reissued, or terminated by the Department
16 for cause as specified in WAC 173-303-830(3),(4), and (5).

17
18 I.C.2. Filing of a Request

19
20 The filing of a request for a permit modification, or revocation and reissuance, or
21 termination, or a notification of planned changes or anticipated noncompliance on the
22 part of the Permittees shall not stay the applicability or enforceability of any Condition
23 except as provided in WAC 173-303-830(3),(4), and (5).

24
25 I.C.3. Modifications

26
27 Except as provided otherwise by specific language in this Permit, the Permit
28 modification procedures of WAC 173-303-830 shall apply to modifications or changes
29 in design or operation of the Facility or any modification or change in dangerous waste
30 management practices covered by this Permit. As an exception, the Permittees shall
31 provide notifications to the Department required by WAC 173-303-830(4)(a)(i)(A) on
32 a quarterly basis. Each quarterly notification shall be submitted within ten days of the
33 end of the quarter and provide the required information for all such modifications put
34 into effect during that reporting period. Quarterly reporting periods shall be based
35 upon the state Fiscal Year.

36
37 I.D. SEVERABILITY

38
39 I.D.1. Effect of Invalidation

40
41 The provisions of this Permit are severable, and if any provision of this Permit, or the
42 application of any provision of this Permit to any circumstance is contested and/or
43 held invalid, the application of such provision to other circumstances and the
44 remainder of this Permit shall not be affected thereby. Invalidation of any State

1 statutory or regulatory provision which forms the basis for any Condition of this
2 Permit does not affect the validity of any other State statutory or regulatory basis for
3 said Condition.
4

5 I.D.2. **Final Resolution**

6
7 In the event that a Condition of this Permit is stayed for any reason, the Permittees
8 shall continue to comply with the related applicable and relevant interim status
9 standards in WAC 173-303-400 until final resolution of the stayed Condition, unless
10 the Department determines compliance with the related applicable and relevant interim
11 status standards would be technologically incompatible with compliance with other
12 Conditions of this Permit which have not been stayed, or unless the FFACO authorizes
13 an alternative action, in which case the Permittees shall comply with the FFACO.
14

15 I.E. **DUTIES AND REQUIREMENTS**

16
17 I.E.1. **Duty to Comply**

18
19 The Permittees shall comply with all Conditions of this Permit, except to the extent
20 and for the duration such noncompliance is authorized by an emergency permit issued
21 under WAC 173-303-804. Any Permit noncompliance other than noncompliance
22 authorized by an emergency permit constitutes a violation of Chapter 70.105 RCW, as
23 amended, and is grounds for enforcement action, Permit termination, modification or
24 revocation and reissuance of the Permit, and/or denial of a Permit renewal application.
25

26 I.E.2. **Compliance Not Constituting Defense**

27
28 Compliance with the terms of this Permit does not constitute a defense to any order
29 issued or any action brought under Section 3007, 3008, 3013, or 7003 of RCRA (42
30 U.S.C. Sections 6927, 6928, 6934, and 6973), Section 104, 106(a) or 107 of the
31 Comprehensive Environmental Response, Compensation, and Liability Act of 1980
32 (CERCLA) [42 U.S.C. Sections 9604, 9606(a), and 9607], as amended by the
33 Superfund Amendments and Reauthorization Act of 1986 (42 U.S.C. 9601 *et seq.*), or
34 any other federal, state or local law governing protection of public health or the
35 environment; provided, however, that compliance with this Permit during its term
36 constitutes compliance at those areas subject to this Permit for the purpose of
37 enforcement with WAC 173-303-140, WAC 173-303-180, WAC 173-303-280
38 through -395, WAC 173-303-600 through -680, WAC 173-303-810, and WAC 173-
39 303-830, except for Permit modifications and those requirements not included in the
40 Permit that become effective by statute, or that are promulgated under 40 CFR Part
41 268 restricting the placement of dangerous waste in or on the land.
42
43
44

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1 I.E.3. **Duty to Reapply**

2
3 If the Permittees wish to continue an activity regulated by this Permit after the
4 expiration date of this Permit, the Permittees must apply for and obtain a new Permit,
5 in accordance with WAC 173-303-806(6).
6

7 I.E.4. **Permit Expiration and Continuation**

8
9 This Permit, and all Conditions herein, will remain in effect beyond the Permit's
10 expiration date until the effective date of the new permit if the Permittees have
11 submitted a timely, complete application for renewal per WAC 173-303-806 and,
12 through no fault of the Permittees, the Department has not made a final Permit
13 determination as set forth in WAC 173-303-840.
14

15 I.E.5. **Need to Halt or Reduce Activity Not a Defense**

16
17 It shall not be a defense in the case of an enforcement action that it would have been
18 necessary to halt or reduce the permitted activity in order to maintain compliance with
19 the Conditions of this Permit.
20

21 I.E.6. **Duty to Mitigate**

22
23 In the event of noncompliance with the Permit, the Permittees shall take all reasonable
24 steps to minimize releases to the environment, and shall carry out such measures as are
25 reasonable to minimize or correct adverse impacts on human health and the
26 environment.
27

28 I.E.7. **Proper Operation and Maintenance**

29
30 The Permittees shall at all times properly operate and maintain all facilities and
31 systems of treatment and control which are installed or used by the Permittees to
32 achieve compliance with the Conditions of this Permit. Proper operation and
33 maintenance includes effective performance, adequate funding, adequate operator
34 staffing and training, and adequate laboratory and process controls including
35 appropriate quality assurance/quality control procedures. This provision requires the
36 operation of backup or auxiliary facilities or similar systems only when necessary to
37 achieve compliance with the Conditions of the Permit.
38

39 I.E.8. **Duty to Provide Information**

40
41 The Permittees shall furnish to the Department, within a reasonable time, any relevant
42 information which the Department may request to determine whether cause exists for

modifying, revoking and reissuing or terminating this Permit, or to determine compliance with this Permit. The Permittees shall also furnish to the Department, upon request, copies of records required to be kept by this Permit.

I.E.9. Inspection and Entry

The Permittees shall allow the Department, or authorized representatives, upon the presentation of Department credentials, to:

I.E.9.a. During operating hours and at all other reasonable times, enter and inspect the Facility or any unit or area within the Facility where regulated activities are located or conducted, or where records must be kept under the Conditions of this Permit;

I.E.9.b. Have access to, and copy, at reasonable times, any records that must be kept under the Conditions of this Permit;

I.E.9.c. Inspect at reasonable times any portion of the Facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and,

I.E.9.d. Sample or monitor, at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by State law, as amended, for substances or parameters at any location.

I.E.10. Monitoring and Records

I.E.10.a. Samples and measurements taken by the Permittees for the purpose of monitoring required by this Permit shall be representative of the monitored activity. Sampling methods shall be in accordance with WAC 173-303-110 or 40 CFR 261, unless otherwise specified in this Permit or agreed to in writing by the Department. Analytical methods shall be as specified in the most recently published test procedure of the documents cited in WAC 173-303-110(3)(a) through (d), unless otherwise specified in this Permit or agreed to in writing by the Department.

I.E.10.b. The Permittees shall retain at the TSD unit(s), or other location approved by the Department, as specified in Parts III or V of this Permit, records of monitoring information required for compliance with this Permit, including calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of reports and records required by this Permit, and records of data used to complete the application for this Permit for a period of at least ten (10) years from the date of the sample, measurement, report, or application, unless otherwise required for certain information by other Conditions of this Permit. This information may be retained on electronic media.

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- 1 I.E.10.c. The Permittees shall retain at the Facility, or other approved location, records of all
2 monitoring and maintenance records, copies of all reports and records required by this
3 Permit, and records of all data used to complete the application for this Permit which
4 are not associated with a particular TSD unit for a period of at least ten (10) years
5 from the date of certification of completion of postclosure care or corrective action for
6 the Facility, whichever is later. This information may be retained on electronic media.
7
8
- 9 I.E.10.d. The record retention period may be extended by request of the Department at any time
10 by notification, in writing, to the Permittees and is automatically extended during the
11 course of any unresolved enforcement action regarding this Facility to ten (10) years
12 beyond the conclusion of the enforcement action.
13
- 14 I.E.10.e. Records of monitoring information shall include:
15
16 i. The date, exact place and time of sampling or measurements;
17
18 ii. The individual who performed the sampling or measurements and their
19 affiliation;
20
21 iii. The dates the analyses were performed;
22
23 iv. The individual(s) who performed the analyses and their affiliation;
24
25 v. The analytical techniques or methods used; and,
26
27 vi. The results of such analyses.
28
- 29 I.E.11. **Reporting Planned Changes**
30
31 The Permittees shall give notice to the Department as soon as possible of any planned
32 physical alterations or additions to the Facility subject to this Permit. Such notice
33 does not authorize any noncompliance with or modification of this Permit.
34
- 35 I.E.12. **Certification of Construction or Modification**
36
37 The Permittees may not commence treatment, storage, or disposal of dangerous wastes
38 in a new or modified portion of TSD units subject to this Permit until:
39
40 i. The Permittees have submitted to the Department, by certified mail, overnight
41 express mail, or hand delivery, a letter signed by the Permittees and a
42 registered professional engineer stating that the TSD unit has been constructed
43 or modified in compliance with the Conditions of this Permit; and,
44

- ii. The Department has inspected the modified or newly constructed TSD unit, and finds that it is in compliance with the Conditions of this Permit; or
- iii. Within 15 days of the date of receipt of the Permittees' letter, the Permittees have not received notice from the Department of its intent to inspect, prior inspection is waived, and the Permittees may commence treatment, storage, and disposal of dangerous waste.

I.E.13. Anticipated Noncompliance

The Permittees shall give at least 30 days advance notice to the Department of any planned changes in the Facility subject to this Permit or planned activity which might result in noncompliance with Permit requirements.

If 30 days advance notice is not possible, then the Permittees shall give notice immediately after the Permittees become aware of the anticipated noncompliance. Such notice does not authorize any noncompliance with or modification of this Permit.

I.E.14. Transfer of Permits

This Permit may be transferred to a new owner only if it is modified or revoked and reissued pursuant to WAC 173-303-830(3)(b). The Permit may be transferred to a new co-operator in accordance with the provisions of WAC 173-303-830(2). Before transferring ownership or operation of the Facility during its operating life, the Permittees shall notify the new owner or operator in writing of the requirements of WAC 173-303-600 and -806 and this Permit.

I.E.15. Immediate Reporting

I.E.15.a The Permittees shall verbally report to the Department any release of dangerous waste or hazardous substances, or any noncompliance with the Permit which may endanger human health or the environment. Any such information shall be reported immediately after the Permittees become aware of the circumstances.

I.E.15.b. The immediate verbal report shall contain all the information needed to determine the nature and extent of any threat to human health and the environment, including the following:

- i. Name, address, and telephone number of the Permittee responsible for the release or noncompliant activity;
- ii. Name, location, and telephone number of the unit at which the release occurred;

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- 1 iii. Date, time, and type of incident;
2
3 iv. Name and quantity of material(s) involved;
4
5 v. The extent of injuries, if any;
6
7 vi. An assessment of actual or potential hazard to the environment and human
8 health, where this is applicable;
9
10 vii. Estimated quantity of released material that resulted from the incident; and,
11
12 viii. Actions which have been undertaken to mitigate the occurrence.
13
14 I.E.15.c. The Permittees shall report, in accordance with Conditions I.E.15.a. and I.E.15.b., any
15 information concerning the release or unpermitted discharge of any dangerous waste or
16 hazardous substances that may cause an endangerment to drinking water supplies or
17 ground or surface waters, or of a release or discharge of dangerous waste or hazardous
18 substances or of a fire or explosion at the Facility, which may threaten human health
19 or the environment. The description of the occurrence and its cause shall include all
20 information necessary to fully evaluate the situation and to develop an appropriate
21 course of action.
22
23 I.E.15.d. For any release or noncompliance not required to be reported to the Department
24 immediately, a brief account must be entered within two (2) working days, into the
25 TSD operating record, for a TSD unit, or into the Facility operating record, inspection
26 log or separate spill log, for non-TSD units. This account must include: the time and
27 date of the release, the location and cause of the release, the type and quantity of
28 material released, and a brief description of any response actions taken or planned.
29
30 I.E.15.e. All releases, regardless of location of release or quantity of release, shall be controlled
31 and mitigated, if necessary, as required by WAC 173-303-145(3).
32
33 I.E.16. **Written Reporting**
34
35 Within 15 days after the time the Permittees become aware of the circumstances of any
36 noncompliance with this Permit which may endanger human health or the environment,
37 the Permittees shall provide to the Department a written report. The written report
38 shall contain a description of the noncompliance and its cause (including the
39 information provided in the verbal notification); the period of noncompliance including
40 exact dates and times; the anticipated time noncompliance is expected to continue if
41 the noncompliance has not been corrected; corrective measures being undertaken to
42 mitigate the situation, and steps taken or planned to reduce, eliminate, and prevent
43 reoccurrence of the noncompliance.
44

1 I.E.17. **Manifest Discrepancy Report**

2
3 I.E.17.a. For dangerous waste received from outside the Facility, whenever a significant
4 discrepancy in a manifest is discovered, the Permittees shall attempt to reconcile the
5 discrepancy. If not reconciled within 15 days of discovery, the Permittees shall submit
6 a letter report in accordance with WAC 173-303-370(4), including a copy of the
7 applicable manifest or shipping paper, to the Department.
8

9 I.E.17.b. For dangerous waste which is being transported within the Facility (i.e., shipment of
10 on-site generated dangerous waste), whenever a significant discrepancy in the shipping
11 papers (see Condition II.Q.1.) is discovered, the Permittees shall attempt to reconcile
12 the discrepancy. If not reconciled within 15 days of discovery, the Permittees shall
13 note the discrepancy in the receiving unit's operating record.
14

15 I.E.18. **Unmanifested Waste Report**

16
17 The Permittees shall follow the provisions of WAC 173-303-370 for the receipt of any
18 dangerous waste shipment from off-site. The Permittees shall also submit a report in
19 accordance with WAC 173-303-390(1) to the Department within 15 days of receipt of
20 any unmanifested dangerous waste shipment received from off-site sources.
21

22 I.E.19. **Other Noncompliance**

23
24 The Permittees shall report to the Department all instances of noncompliance not
25 otherwise required to be reported elsewhere in this Permit at the time the Annual
26 Dangerous Waste Report is submitted.
27

28 I.E.20. **Other Information**

29
30 Whenever the Permittees become aware that they have failed to submit any relevant
31 facts in a permit application, closure plan, or postclosure plan, or submitted incorrect
32 information in a permit application, closure plan, or postclosure plan, or in any report
33 to the Department, the Permittees shall promptly submit such facts or corrected
34 information.
35

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1 I.E.21. **Reports, Notifications and Submissions**

2
3 All written reports, notifications or other submissions which are required by this
4 Permit to be sent or given to the Director or Department should be sent certified mail,
5 overnight express mail or hand delivered to:

6
7 Nuclear Waste Program
8 Regulatory and Technical Support Unit
9 Department of Ecology
10 300 Desmond Drive
11 Lacey, Washington 98503
12 Telephone: (206) 407-7132,

13
14 and

15
16 Department of Ecology
17 200 Area Section
18 1315 West Fourth Avenue
19 Kennewick, Washington 99336
20 Telephone: (509) 735-7581

21
22 Telephonic and oral reports/notifications need only be provided to the Department's
23 Kennewick Office.

24
25 These are the current phone numbers and addresses and may be subject to change.
26 The Department shall give the Permittees written notice of a change in address or
27 telephone number. It is the responsibility of the Permittees to ensure any required
28 reports, notifications or other submissions are transmitted to the addressee listed in this
29 Condition. However, the Permittees shall not be responsible for ensuring verbal and
30 written correspondence reaches a new address or telephone number until after their
31 receipt of the Department's written notification.

32
33 I.E.22. **Annual Report**

34
35 The Permittees shall comply with the annual reporting requirements of WAC 173-303-
36 390(2)(a) through (e) and (g).

37
38 I.F. **SIGNATORY REQUIREMENT**

39
40 All applications, reports, or information submitted to the Department which require
41 certification shall be signed and certified in accordance with WAC 173-303-810(12)
42 and (13). All other reports required by this Permit and other information requested by
43 the Department shall be signed in accordance with WAC 173-303-810(12).
44

1 I.G. CONFIDENTIAL INFORMATION

2
3 The Permittees may claim confidential any information required to be submitted by
4 this Permit, at the time of submission, in accordance with WAC 173-303-810(15).
5

6 I.H. DOCUMENTS TO BE MAINTAINED AT FACILITY SITE

7
8 The Permittees shall maintain at the Facility, or some other location approved by the
9 Department, the following documents and amendments, revisions, and modifications to
10 these documents:
11

- 12 1. This Permit and all attachments;
- 13 2. All dangerous waste Part B permit applications, postclosure permit
14 applications and closure plans; and,
15
- 16 3. The Facility Operating Record.
17

18
19 These documents shall be maintained for ten (10) years after postclosure care or
20 corrective action for the Facility, whichever is later, has been completed and certified
21 as complete.
22

PART II - GENERAL FACILITY CONDITIONS

II.A. FACILITY CONTINGENCY PLAN

II.A.1. The Permittees shall immediately carry out the provisions of the Contingency Plan as provided in Attachment 4, pursuant to WAC 173-303-360(2), whenever there is a release of dangerous waste or dangerous waste constituents, or other emergency circumstance, either of which threatens human health or the environment.

II.A.2. The Permittees shall comply with the requirements of WAC 173-303-350(4), as provided in the Hanford Facility Contingency Plan (Attachment 4). The Hanford Facility Contingency Plan contains reference to unit-specific contingency plans included in Part III of this Permit.

II.A.3. The Permittees shall review and amend, if necessary, the Hanford Facility Contingency Plan, as provided in Permit Attachment 4, pursuant to WAC 173-303-350(5) and in accordance with the provisions of WAC 173-303-830(4). The plan shall be amended within a period of time agreed upon by the Department.

II.A.4. The Permittees shall comply with the requirements of WAC 173-303-350(3) and - 360(1) concerning the emergency coordinator, except the names and home telephone numbers will be on file with the Occurrence Notification Center, phone number (509) 376-2900.

II.A.5. The Facility Contingency Plan, as provided in Attachment 4, shall be modified as follows:

Page APP 7A-2, lines 2 and 49. The emergency telephone number "'811" shall be replaced with "911."

Page APP 7A-3, lines 45 through 48. The emergency telephone number "811" shall be replaced with "911."

Page 7A-T1, lines 11 through 12. The term "Emergency Management Center Location: 1170 Building" shall be replaced with "Site Operation Team Location: Federal Building, Richland."

II.B. PREPAREDNESS AND PREVENTION

II.B.1. The Permittees shall equip the Facility with the equipment specified in the Hanford Facility Contingency Plan (Attachment 4) pursuant to WAC 173-303-340(1). Unit-specific preparedness and prevention provisions are included in Parts III and V of this Permit.

- 1 II.B.2. The Permittees shall test and maintain the equipment specified in the previous
2 condition as necessary to assure proper operation in the event of emergency.
3
- 4 II.B.3. The Permittees shall maintain access to communications or alarms pursuant to WAC
5 173-303-340(2), as provided in the Hanford Facility Contingency Plan (Attachment 4)
6 and unit-specific contingency plans.
7
- 8 II.B.4. The Permittees shall comply with WAC 173-303-340(4) and WAC 173-303-355(1)
9 pertaining to arrangements with local authorities.
10
- 11 II.C. PERSONNEL TRAINING
12
- 13 II.C.1. The Permittees shall conduct personnel training as required by WAC 173-303-330.
14 The Permittees shall maintain documents in accordance with WAC 173-303-330(2)
15 and (3). Training records may be maintained in the Hanford Facility operating record
16 or on electronic data storage.
17
- 18 II.C.2. All Hanford Facility personnel shall receive general Facility training within six months
19 of hire. This training shall provide personnel with orientation of dangerous waste
20 management activities being conducted on the Hanford Facility. This training shall
21 include:
22
- 23 II.C.2.a. Description of emergency signals and appropriate personnel response,
24
- 25 II.C.2.b. Identification of contacts for information regarding dangerous waste management
26 activities,
27
- 28 II.C.2.c. Introduction to waste minimization concepts,
29
- 30 II.C.2.d. Identification of contact(s) for emergencies involving dangerous waste, and
31
- 32 II.C.2.e. Familiarization with the Hanford Facility Contingency Plan.
33
- 34 II.C.3. Description of training plans for personnel assigned to TSD units subject to this
35 Permit are delineated in the unit-specific chapters in Parts III or V of this Permit.
36
- 37 II.C.4. The Permittees shall provide the necessary training to non-Facility personnel (i.e.,
38 visitors, sub-contractors) as appropriate for the locations such personnel will be at and
39 the activities that will be undertaken. At a minimum, this training shall describe
40 dangerous waste management hazards at the Facility.
41
42
43
44

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1 II.D. WASTE ANALYSIS

2
3 II.D.1. All waste analyses required by this Permit shall be conducted in accordance with a
4 written waste analysis plan (WAP) or sampling and analysis plan (SAP). Operating
5 TSD units shall have a WAP, which shall be approved through incorporation of the
6 TSD unit into Part III of this Permit. Closing TSD units shall have a SAP and, if
7 necessary, a WAP which shall be approved through incorporation of the TSD unit into
8 Part V of this Permit.

9
10 II.D.2. Until a WAP is implemented in accordance with Condition II.D.1., any unit(s)
11 identified in Parts III or V of this Permit without a unit-specific waste analysis plan
12 approved by the Department shall not treat, store, or dispose of dangerous waste,
13 unless specified otherwise by the Department in writing.

14
15 II.D.3. Each TSD unit WAP shall include:

- 16
17 i. The parameters for which each dangerous waste will be analyzed, and the
18 rationale for selecting these parameters;
19 ii. The methods of obtaining or testing for these parameters;
20
21 iii. The methods for obtaining representative samples of wastes for analysis
22 (representative sampling methods are discussed in WAC 173-303-110(2);
23
24 iv. The frequency with which analysis of a waste will be reviewed or repeated to
25 ensure that the analysis is accurate and current;
26
27 v. The waste analyses which generators have agreed to supply;
28
29 vi. Where applicable, the methods for meeting the additional waste analysis
30 requirements for specific waste management methods as specified in WAC
31 173-303-630 through 173-303-670; and,
32
33 vii. For off-site facilities, the procedures for confirming that each dangerous waste
34 received matches the identity of the waste specified on the accompanying
35 manifest or shipping paper. This includes at least:
36
37 (1) The procedure for identifying each waste movement at the Facility;
38 and,
39
40 (2) The method for obtaining a representative sample of the waste to be
41 identified, if the identification method includes sampling.
42

43 II.D.4. Should waste analysis be required by this Permit at a location on the Facility other
44 than at a TSD unit, a SAP shall be maintained by the Permittees and made available

upon request from the Department. Any SAP required by this Permit not associated with a particular TSD unit shall include the elements of Conditions II.D.3.(i) through II.D.3.(iv).

II.E. QUALITY ASSURANCE/QUALITY CONTROL

II.E.1. All WAPs and SAPs required by this Permit shall include a quality assurance/quality control (QA/QC) plan or equivalent to document all monitoring procedures so as to ensure that all information, data, and resulting decisions are technically sound, statistically valid, and properly documented. Each QA/QC plan shall include, or contain a reference to another document which will be used and includes, the elements defined in Conditions II.E.2. and II.E.3. The QA/QC plan may be part of a SAP, WAP, or equivalent.

II.E.2. Each QA/QC plan shall contain a Data Quality Assurance Plan which includes the following:

II.E.2.a. A Data Collection Strategy section including, but not be limited to, the following:

- i. A description of the intended uses for the data, and the necessary level of precision and accuracy for these intended uses; and,
- ii. A description of methods and procedures to be used to assess the precision, accuracy, and completeness of the measurement data;

II.E.2.b. A Sampling section which shall include or describe and reference or cite:

- i. Sampling methods including the identification of sampling equipment, a description of purging procedures, and a description of decontamination procedures to be used;
- ii. Criteria for selecting appropriate sampling locations, depths, etc., or identification and justification of sample collection points and frequencies;
- iii. Criteria for providing a statistically sufficient number of samples as defined in EPA guidance or criteria for determining a technically sufficient number of measurements to meet the needs of the project as determined through the DQO planning process;
- iv. Methods for, or specification of, measuring all necessary ancillary data;
- v. Criteria for, or specification of, determining conditions under which sampling should be conducted;

- 1 vi. Criteria for establishing, or specification of, which parameters are to be
- 2 measured at each sample collection point and the frequency that each
- 3 parameter is to be measured;
- 4
- 5 vii. Criteria for, or specification of, identifying the type of sampling (e.g.,
- 6 composites vs. grabs) and number of samples to be collected;
- 7
- 8 viii. Criteria for, or specification of, measures to be taken to prevent contamination
- 9 of the sampling equipment and cross contamination between sampling points;
- 10
- 11 ix. Methods and documentation of field sampling operations and procedure
- 12 descriptions, as appropriate, including:
- 13
- 14 (1) Documentation of procedures for preparation of reagents or supplies
- 15 which become an integral part of the sample (e.g., filters and
- 16 absorbing reagents);
- 17
- 18 (2) Procedure descriptions and forms for recording the exact location,
- 19 sampling conditions, sampling equipment, and visual condition of
- 20 samples;
- 21
- 22 (3) Documentation of specific sample preservation method;
- 23
- 24 (4) Calibration of field devices;
- 25
- 26 (5) Collection of replicate samples;
- 27
- 28 (6) Submission of field-biased blanks, where appropriate;
- 29
- 30 (7) Potential interferences present at the facility;
- 31
- 32 (8) Field equipment listing and sample containers;
- 33
- 34 (9) Sampling order; and,
- 35
- 36 (10) Descriptions of decontamination procedures.
- 37
- 38 x. Selection of appropriate sample containers, as applicable;
- 39
- 40 xi. Sample preservation methods, as applicable; and,
- 41
- 42 xii. Chain-of-custody procedure descriptions as applicable, including:
- 43

- (1) Standardized field tracking reporting forms to establish sample custody in the field prior to and during shipment; and,
- (2) Pre-prepared sample labels containing all information necessary for effective sample tracking, except where such information is generated in the field in which case blank spaces shall be provided on the pre-prepared sampling label.

II.E.2.c.

Where applicable, a Field Measurements section which shall address:

- i. Selecting appropriate field measurement locations, depths, etc.;
- ii. Providing a statistically sufficient number of field measurements as defined in EPA guidance or criteria for determining a technically sufficient number of measurements to meet the needs of the project as determined through the DQO process;
- iii. Measuring all necessary ancillary data;
- iv. Determining conditions under which field measurements should be conducted;
- v. Determining which media are to be addressed by appropriate field measurements (e.g., ground water, air, soil, sediment, etc.);
- vi. Determining which parameters are to be measured and where;
- vii. Selecting the frequency of field measurement and length of field measurements period; and,
- viii. Documenting field measurement operations and procedures, including:
 - (1) Descriptions of procedures and forms for recording raw data and the specific location, time, and sampling conditions;
 - (2) Calibration of field devices;
 - (3) Collection of replicate measurements;
 - (4) Submission of field-biased blanks, where appropriate;
 - (5) Potential interferences present at the facility;
 - (6) Field equipment listing; and,

- 1 (7) Descriptions of decontamination procedures.
2
3 II.E.2.d. Where applicable, a Sample Analysis section which shall specify the following:
4
5 i. Chain-of-custody procedures, including:
6
7 (1) Certification that all samples obtained for analysis will be delivered to
8 a responsible person at the recipient laboratory who is authorized to
9 sign for incoming field samples, obtain documents of shipment, and
10 verify the data entered onto the sample custody records;
11
12 (2) Provision for a laboratory sample custody log; and,
13
14 (3) Specification of chain-of-custody procedures for sample handling,
15 storage, and dispersement for analysis.
16
17 ii. Sample storage procedure descriptions and storage times;
18
19 iii. Sample preparation methods;
20
21 iv. Descriptions of analytical procedures, including:
22
23 (1) Scope and application of the procedure;
24
25 (2) Sample matrix;
26
27 (3) Potential interferences;
28
29 (4) Precision and accuracy of the methodology; and,
30
31 (5) Method detection limits.
32
33 v. Descriptions of calibration procedures and frequency;
34
35 vi. Data reduction, validation, and reporting;
36
37 vii. Internal laboratory quality control checks, laboratory performance, and
38 systems audits and frequency, including:
39
40 (1) Method blank(s);
41
42 (2) Laboratory control sample(s);
43
44 (3) Calibration check sample(s);

- (4) Replicate sample(s);
- (5) Matrix-spiked sample(s);
- (6) "Blind" quality control;
- (7) Control charts;
- (8) Surrogate samples;
- (9) Zero and span gases; and,
- (10) Reagent quality control checks.

II.E.3. Each QA/QC plan shall include a Data Management Plan or equivalent, to document and track data and results. This plan shall identify and establish data documentation materials and procedures, project or unit file requirements, and project-related progress reporting procedures and documents. The storage location for the raw data shall be identified. The plan shall also provide the format to be used to record and, for projects, present the validated and unvalidated data and conclusions. The Data Management Plan shall include the following as applicable:

II.E.3.a. A data record including the following:

- i. Unique sample or field measurement code;
- ii. Sampling or field measurement location including surveyed horizontal coordinates and elevation of the sample location, and sample or measurement type;
- iii. Sampling or field measurement raw data;
- iv. Laboratory analysis ID number;
- v. Result of analysis (e.g., concentration);
- vi. Elevations of reference points for all ground water level measurements, including water level elevation, top of casing elevation, and ground surface elevation; and,
- vii. Magnetic computer records of all ground water, soil, surface water, and sediment analytical data.

- 1 II.E.3.b. Tabular displays, as appropriate, illustrating:
2
3 i. Unsorted validated and unvalidated data;
4
5 ii. Results for each medium and each constituent monitored;
6
7 iii. Data reduction for statistical analysis;
8
9 iv. Sorting of data by potential stratification factors (e.g., location, soil layer,
10 topography); and,
11
12 v. Summary data.
13
- 14 II.E.3.c. Graphical displays (e.g., bar graphs, line graphs, area or plan maps, isopleth plots,
15 cross-sectional plots or transects, three dimensional graphs, etc.), as appropriate,
16 presenting the following:
17
18 i. Displays of sampling location and sampling grid;
19
20 ii. Identification of boundaries of sampling area and areas where more data are
21 required;
22
23 iii. Displays of concentrations of contamination at each sampling location;
24
25 iv. Displays of geographical extent of contamination;
26
27 v. Areal and vertical displays of contamination concentrations, concentration
28 averages, and concentration maxima, including isoconcentration maps for
29 contaminants found in environmental media at the Facility;
30
31 vi. Illustrations of changes in concentration in relation to distance from the
32 source, time, depth, or other parameters;
33
34 vii. Identification of features affecting intramedia transport and identification of -
35 potential receptors;
36
37 viii. For each round of ground water level measurements, maps showing the
38 distribution of head measurements in each aquifer; and,
39
40 ix. For each well, provide a hydrograph that shows the distribution of water level
41 measurements taken during the time interval of the investigation.
42
- 43 II.E.4. Unless otherwise agreed upon in writing by the Department, the Permittees shall
44 provide notification of availability to the Department of all data obtained pursuant to

1 this Permit within 30 days of receipt by the Permittees, or after completion of QA/QC
2 activities, if applicable. If the Department agrees that data will be obtained on a
3 routine basis for a particular unit, the Permittees shall only be required to provide
4 notification of data availability within 30 days of first availability along with a
5 statement as to expected frequency of future data. If routine data is not acquired at the
6 stated expected frequency, the Permittees shall notify the department within 30 days
7 with an explanation and revision, if applicable. This notification requirement shall
8 also apply to any other information obtained from activities conducted, or data
9 obtained, that may influence activities pursuant to this Permit.

10
11 II.E.5. The level of QA/QC for the collection, preservation, transportation, and analysis of
12 each sample which is required for implementation of this Permit may be based upon
13 Department approved data quality objectives for the sample. These data quality
14 objectives shall be approved by the Department, in writing, or through incorporation
15 of unit plans and permits into Parts III or V of this Permit.

16
17 II.F. GROUNDWATER AND VADOSE ZONE MONITORING

18
19 The Permittees shall comply with the groundwater monitoring requirements of WAC
20 173-303-645. This Condition shall apply only to those wells the Permittees use for the
21 groundwater monitoring programs applicable to the TSD units incorporated into Parts
22 III or V of this Permit. Where releases from TSD units subject to this Permit have
23 been documented or confirmed by investigation, or where vadose zone monitoring is
24 proposed for integration with groundwater monitoring, the Permittees shall evaluate
25 the applicability of vadose zone monitoring. The Permittees shall consult with the
26 Department regarding the implementation of these requirements. If agreed to by the
27 Department, integration of groundwater and vadose zone monitoring for reasons other
28 than this Permit may be accommodated by this Permit. Results from other
29 investigation activities shall be used whenever possible to supplement and/or replace
30 sampling required by this Permit.

31
32 II.F.1. **Purgewater Management**

33
34 Purgewater shall be handled in accordance with the requirements set forth in
35 Attachment 5, *Purgewater Management Plan*.

36
37 II.F.2. **Well Remediation and Abandonment**

38
39 II.F.2.a. The Permittees shall inspect the integrity of active resource protection wells as defined
40 by WAC 173-160-030 subject to this Permit at least once every five (5) years. These
41 inspections shall be recorded in the Operating Record. The Permittees shall prepare a
42 plan and schedule within 120 days after the effective date of this Permit, specifying the
43 schedule and technical standards for this program. The Permittees shall provide a
44 copy of this plan upon the request of the Department.

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1 II.F.2.b. The permittees shall evaluate resource protection wells subject to this Permit
2 according to Sections 4.1. through 4.8.3. of the *Hanford Well Remediation and*
3 *Decommissioning Plan* (Attachment 6) and the Policy on Remediation of Existing
4 Wells and Acceptance Criteria for RCRA and CERCLA, June 1990 (Attachment 7) to
5 determine if a well has a potential use as a qualified well. The Permittees shall
6 abandon or remediate unusable wells according to the requirements of Chapter 18.104
7 RCW, Chapter 173-160 WAC, and Chapter 173-162 WAC to ensure that the integrity
8 of wells subject to this Permit is maintained. The timeframe for this remediation will
9 be specified in Parts III or V of this Permit.

10
11 II.F.2.c. The Department shall receive notice in writing at least 72 hours before the Permittees
12 remediate (excluding maintenance activities) or abandon any well subject to this
13 Permit.

14
15 II.F.2.d. For wells subject to this Permit, the Permittees shall achieve full compliance with
16 Chapter 173-160 WAC and Chapter 18.104 RCW consistent with a rolling five (5)
17 year schedule agreed to by the Department and the Permittees. This process shall be
18 completed by the year 2012.

19
20 II.F.3. **Well Construction**

21
22 All wells constructed pursuant to this Permit shall be constructed in compliance with
23 Chapter 173-160 WAC.

24
25 II.G. **SITING CRITERIA**

26
27 The Permittees shall comply with the applicable notice of intent and siting criteria of
28 WAC 173-303-281 and WAC 173-303-282, respectively.

29
30 II.H. **RECORDKEEPING AND REPORTING**

31
32 In addition to the recordkeeping and reporting requirements specified elsewhere in this
33 Permit, the Permittees shall comply with the following:

34
35 II.H.1. **Cost Estimate for Facility Closure**

36
37 The Permittees shall submit an annual report updating projections of anticipated costs
38 for closure and postclosure of TSD units incorporated into Parts III or V of this
39 Permit. This report will be submitted annually, by October 31, to the Department and
40 reflect cost updates as of September 30, of the past Fiscal Year.
41
42
43
44

1 II.H.2. **Cost Estimate for Postclosure Monitoring and Maintenance**

2
3 The Permittees shall submit an annual report updating projects of anticipated costs for
4 postclosure monitoring and maintenance for TSD units incorporated into Parts III or V
5 of this Permit. This report will be submitted annually, by October 31, to the
6 Department and reflect cost updates as of September 30, of the past Fiscal Year.
7

8 II.H.3. The Permittees are exempt from the requirements of WAC 173-303-620
9

10 II.I. **FACILITY OPERATING RECORD**
11

12 II.I.1. The Permittees shall maintain a written Facility Operating Record until ten (10) years
13 after postclosure or corrective action is complete and certified for the Facility,
14 whichever is later. Except as specifically provided otherwise in this Permit, the
15 Permittees shall also record all information referenced in this Permit in the Facility
16 Operating Record within seven (7) working days after the information becomes
17 available. A TSD unit-specific operating record shall be maintained for each TSD
18 unit at a location identified in Parts III and V of this Permit. Each TSD unit-specific
19 operating record shall be included by reference in the Facility Operating Record.
20 Information required in each TSD unit-specific operating record is identified on a unit-
21 by-unit basis in Part III or V of this Permit. The Facility Operating Record shall
22 include, but not be limited to, the following information:
23

24 II.I.1.a. A description of the system(s) currently utilized to identify and map solid waste
25 management units and their locations. The description of the system(s) is required to
26 include an identification of on-site access to the system's data, and an on-site contact
27 name and telephone number. In addition to, or as part of, this system(s), the
28 Permittees shall also maintain a list identifying active 90-day waste storage areas and
29 dangerous waste satellite accumulation areas and their locations. The list shall
30 identify the location, the predominant waste types managed at the area, and a date
31 identifying when the list was compiled. Maps shall be provided by the Permittees
32 upon request by the Department;
33

34 II.I.1.b. Records and results of waste analyses required by WAC 173-303-300;
35

36 II.I.1.c. An identification of the system(s) currently utilized to generate Occurrence Reports.
37 The identification of the system(s) is required to include a description, an identification
38 of an on-site location of hard-copy Occurrence Reports, an identification of on-site
39 access to the system's data, and an on-site contact name and telephone number;
40

41 II.I.1.d. Copies of all unmanifested waste reports;
42

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- 1 II.I.1.e. Hanford Facility Contingency Plan as well as summary reports and details of all
2 incidents that require implementing the Contingency Plan, as specified in WAC 173-
3 303-360(2)(k);
4
- 5 II.I.1.f. An identification of the system(s) currently utilized and being developed to record
6 personnel training records and to develop training plans. The identification of the
7 system(s) is required to include a description, an identification of on-site access to the
8 system's data, and an on-site contact name and telephone number;
9
- 10 II.I.1.g. Preparedness and prevention arrangements made pursuant to WAC 173-303-340(4)
11 and documentation of refusal by state or local authorities that have declined to enter
12 into agreements in accordance with WAC 173-303-340(5);
13
- 14 II.I.1.h. [Reserved]
15
- 16 II.I.1.i. An identification and description of the report containing closure and postclosure cost
17 estimates required by Conditions II.H.1. and II.H.2. The identification shall provide
18 the on-site location and document number of the report;
19
- 20 II.I.1.j. Documentation (e.g. waste profile sheets) of all dangerous waste transported to or
21 from any TSD unit subject to this Permit. This documentation shall be maintained in
22 the receiving unit's operating record from the time the waste is received;
23
- 24 II.I.1.k. An identification of the system(s) currently utilized to cross-reference waste locations
25 to specific manifest document numbers. The identification of the system(s) is required
26 to include a thorough description, an identification of an on-site location of a hard-
27 copy data report, an identification of on-site access to the system's data, and an on-site
28 contact name and telephone number;
29
- 30 II.I.1.l. [Reserved]
31
- 32 II.I.1.m. Annual Reports required by this Permit;
33
- 34 II.I.1.n. An identification of all systems currently utilized to record monitoring information,
35 including all calibration and maintenance records, and all original strip chart
36 recordings for continuous monitoring instrumentation. The identification of systems
37 shall include a description of the systems. The descriptions shall include a
38 confirmation that the criteria of Condition I.E.10.e. is provided by the utilization of the
39 system. The identification of the systems shall also include an identification of on-site
40 access to the system's data, an on-site contact name and telephone number;
41
- 42 II.I.1.o. [Reserved]
43

- 1 II.I.1.p. Summaries of all records of groundwater corrective action required by WC 173-303-
2 645;
3
4 II.I.1.q. An identification of the system(s) currently being utilized and being developed to
5 evaluate compliance with the Conditions of this Permit and with Chapter 173-303
6 WAC. The identification of the system(s) shall include a description of the system(s),
7 an identification of on-site access to the system's data, and an on-site contact name and
8 telephone number. The description of the system(s) shall also include a definition of
9 which portion(s) of the system(s) are accessible to the Department;
10
11 II.I.1.r. All deed notifications required by this Permit (to be included by reference);
12
13 II.I.1.s. All inspection reports required by this Permit; and,
14
15 II.I.1.t. All other reports as required by this Permit, including ECNs and NCRs.
16
17 II.I.2. The descriptions of systems and/or reports required in Conditions II.I.1.a., II.I.1.c.,
18 II.I.1.f., II.I.1.i., II.I.1.k., II.I.1.n., and II.I.1.q., shall be placed in the Facility
19 Operating Record within twelve months of the effective date of this Permit.
20
21 II.J. FACILITY CLOSURE
22
23 II.J.1. Final closure of the Hanford Facility will be achieved when closure activities for all
24 TSD units have been completed, as specified in Parts III, IV, or V of this Permit.
25 Completion of these activities shall be documented using either certifications of
26 closure, in accordance with WAC 173-303-610(6), or certifications of completion of
27 postclosure care, in accordance with WAC 173-303-610(11).
28
29 II.J.2. The Permittees shall close all TSD units as specified in Parts III or V of this Permit.
30
31 II.J.3. The Permittees shall submit a written notification of or request for a permit
32 modification in accordance with the provisions of WAC 173-303-610(3)(b) whenever
33 there is a change in operating plans, facility design, or the approved closure plan. The
34 written notification or request must include a copy of the amended closure plan for
35 review or approval by the Department.
36
37 II.J.4. The Permittees shall close the Facility in a manner that:
38
39 II.J.4.a. Minimizes the need for further maintenance;
40
41 II.J.4.b. Controls, minimizes or eliminates to the extent necessary to protect human health and
42 the environment, postclosure escape of dangerous waste, dangerous constituents,
43 leachate, contaminated run-off, or dangerous waste decomposition products to the
44 ground, surface water, ground water, or the atmosphere; and,

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1 II.J.4.c. Returns the land to the appearance and use of surrounding land areas to the degree
2 possible given the nature of the previous dangerous waste activity.

3
4 II.J.4.d. Meets the requirements of WAC 173-303-610(2)(b).

5
6 II.K. SOIL/GROUNDWATER CLOSURE PERFORMANCE STANDARDS

7
8 II.K.1. For purposes of Condition II.K., the term "clean closure" shall mean the status of a
9 TSD unit at the Facility which has been closed to the cleanup levels prescribed by
10 WAC 173-303-610(2)(b) provided certification of such closure has been accepted by
11 Ecology.

12
13 II.K.2. The Permittees may close a TSD unit to background levels as defined in Department
14 approved Hanford Site Background Documents if background concentrations exceed
15 the levels prescribed by Condition II.K.1. Closure to these levels, provided the
16 Permittees comply with all other closure requirements for a TSD unit as identified in
17 Parts III or V of this Permit, shall be deemed as "clean closure."

18
19 II.K.3. Except for those TSD units identified in Conditions II.K.1., II.K.2., or II.K.4., the
20 Permittees may close a TSD unit to a cleanup level specified under Method C of
21 Chapter 173-340 WAC. Closure of a TSD unit to these levels, provided the
22 Permittees comply with all other closure requirements for the TSD unit as specified in
23 Parts III or V of the Permit, and provided the Permittees comply with Conditions
24 II.K.3.a. through II.K.3.c., shall be deemed as a "modified closure."

25
26 II.K.3.a. For "modified closures," the Permittees shall provide institutional controls in
27 accordance with WAC 173-340-440 which restricts access to the TSD unit for a
28 minimum of five (5) years following completion of closure. The specific details and
29 duration of institutional controls shall be specified in Parts III or V of this Permit for a
30 particular TSD unit.

31
32 II.K.3.b. For "modified closures", the Permittees shall provide periodic assessments of the TSD
33 unit to determine the effectiveness of the closure. The specific details of the periodic
34 assessments shall be specified in Parts III or V of this Permit. The periodic
35 assessments shall include, as a minimum, a compliance monitoring plan in accordance
36 with WAC 173-340-410 that will address the assessment requirements on a unit by
37 unit basis. At least one (1) assessment activity shall take place after a period of five
38 (5) years from the completion of closure, which will demonstrate whether the soils and
39 groundwater have been maintained at or below the allowed concentrations as specified
40 in Parts III or V of this Permit. Should the required assessment activities identify
41 contamination above the allowable limits as specified in Parts III or V, the TSD unit
42 must be further remediated or the requirements of II.K.4. must be followed. Should
43 the required assessment activities demonstrate that contamination has diminished or

remained the same, the Permittees may request that the Department reduce or eliminate the assessment activities and/or institutional controls.

II.K.3.c. For "modified closures", the Permittees shall specify the specific activities required by this Condition in a postclosure permit application.

II.K.4. For any TSD unit which Conditions II.K.1., II.K.2., or II.K.3., are not chosen as the closure option, closing the TSD unit as a landfill may be selected. Closure and postclosure of the TSD unit as a landfill must follow the procedures and requirements specified in WAC 173-303-610.

II.K.5. The cleanup option selected shall be specified in Parts III or V of this Permit and shall be chosen with consideration of the potential future site use for that TSD unit/area. Definitions contained within Chapter 173-340 WAC shall apply to Condition II.K. where definitions are not otherwise provided by this Permit, the FFACO, or Chapter 173-303 WAC.

II.K.6. Deviations from a TSD unit closure plan required by unforeseen circumstances encountered during closure activities which do not impact the overall closure strategy but provide equivalent results shall be documented in the TSD unit-specific operating record and made available to the Department upon request or during the course of an inspection.

II.K.7. Where agreed to by the Department, integration of other statutorily or regulatory mandated cleanups may be accommodated by this Permit. Results from other cleanup investigation activities shall be used whenever possible to supplement and/or replace TSD unit closure investigation activities. All, or appropriate parts of, multipurpose cleanup and closure documents can be incorporated into this Permit through the Permit modification process. Cleanup and closures conducted under any statutory authority with oversight by either the Department or the Agency which meets the equivalent of the technical requirements of Conditions II.K.1. through II.K.4. may be considered as satisfying the requirements of this Permit.

II.L. DESIGN AND OPERATION OF THE FACILITY

II.L.1. Proper Design and Construction

The Permittees shall design, construct, maintain, and operate the Facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous substances to air, soil, ground water, or surface water which could threaten human health or the environment.

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1 II.L.2. **Design Changes, Nonconformance, and As-Built Drawings**

2
3 II.L.2.a. The Permittees shall conduct all construction subject to this Permit in accordance with
4 the approved designs, plans and specifications that are required by this Permit unless
5 authorized otherwise in Conditions II.L.2.b. or II.L.2.c. For purposes of Conditions
6 II.L.2.b. and II.L.2.c., a Department construction inspector or TSD unit manager are
7 designated representatives of the Department.
8

9 II.L.2.b. During construction of a project subject to this Permit, changes to the approved
10 designs, plans and specifications shall be formally documented with an Engineering
11 Change Notice (ECN). All ECNs shall be maintained in the TSD unit-specific
12 operating record and shall be made available to the Department upon request or during
13 the course of an inspection. The Permittees shall provide copies of ECNs affecting
14 any critical system to the Department within five (5) working days of initiating the
15 ECN. Identification of critical systems shall be included by the Permittees in each
16 TSD unit-specific dangerous waste permit application, closure plan or Permit
17 modification, as appropriate. The Department will review an ECN modifying a
18 critical system and inform the Permittees within two (2) working days in writing
19 whether the proposed ECN, when issued, will require a Class 1, 2, or 3 permit
20 modification. If after two (2) working days the Department has not responded, it will
21 be deemed as acceptance of the ECN by the Department.
22

23 II.L.2.c. During construction of a project subject to this Permit, any work completed which
24 does not meet or exceed the standards of the approved design, plans and specifications
25 shall be formally documented with a nonconformance report (NCR). All NCRs shall
26 be maintained in the TSD unit-specific operating record and shall be made available to
27 the Department upon request or during the course of an inspection. The Permittees
28 shall provide copies of NCRs affecting any critical system to the Department within
29 five (5) working days after identification of the nonconformance. The Department will
30 review an NCR affecting a critical system and inform the Permittees within two (2)
31 working days in writing whether a permit modification is required of any
32 nonconformance and whether prior approval is required from the Department before
33 work proceeds which affects the nonconforming item. If the Department does not
34 respond within two (2) working days, it will be deemed as acceptance and no permit
35 modification is required.
36

37 II.L.2.d. Upon completion of a construction project subject to this Permit, the Permittees shall
38 produce as-built drawings of the project which incorporate the design and construction
39 modifications resulting from all project ECNs and NCRs as well as modifications
40 made pursuant to WAC 173-303-830. The Permittees shall place the drawings into
41 the operating record within 12 months of completing construction, or within an
42 alternate period of time specified in a unit-specific Condition in Part III or V of this
43 Permit.
44

1 II.L.3. Facility Compliance

2
3 The Permittees in receiving, storing, transferring, handling, treating, processing, and
4 disposing of dangerous waste shall design, operate and/or maintain the Facility in
5 compliance with all applicable federal, state and local laws and regulations.
6

7 II.M. SECURITY

8
9 The Permittees shall comply with the security provisions of WAC 173-303-310. The
10 Permittees may comply with the requirements of WAC 173-303-310(2) on a unit-by-
11 unit basis.
12

13 II.N. RECEIPT OF DANGEROUS WASTES GENERATED OFF-SITE

14
15 II.N.1. Receipt of Off-Site Waste

16
17 The Permittees shall comply with Conditions II.N.2. and II.N.3. for any dangerous
18 wastes which are received from either sources outside the United States or from off-
19 site generators.
20

21 II.N.2. Waste From Sources Outside the United States

22
23 The Permittees shall meet the requirements of WAC 173-303-290(1) for waste
24 received from outside the United States.
25

26 II.N.3. Notice to Generator

27
28 For waste received from off-site sources (except where the owner/operator is also the
29 generator), the Permittees shall inform the generator in writing that they have the
30 appropriate permits for, and will accept, the waste the generator is shipping, as
31 required by WAC 173-303-290(3). The Permittees shall keep a copy of this written
32 notice as part of the TSD unit-specific operating record.
33

34 II.O. GENERAL INSPECTION REQUIREMENTS

35
36 II.O.1. The Permittees shall inspect the Facility to prevent malfunctions and deterioration,
37 operator errors, and discharges which may cause or lead to the release of dangerous
38 waste constituents to the environment, or a threat to human health. Inspections must
39 be conducted in accordance with the provisions of WAC 173-303-320(2). In addition
40 to the TSD unit inspections specified in Parts III or V, the following inspections will
41 also be conducted.
42

43 II.O.1.a. The 100, 200 East, 200 West, 300, 400, and 1100 areas shall be inspected annually.
44

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- 1 II.O.1.b. The Permittees shall inspect the banks of the Columbia River, contained within the
2 Facility boundary, two (2) times yearly. One (1) inspection shall occur at the low
3 water mark of the year and one (1) inspection shall occur at a time chosen by the
4 Permittees. These inspections shall be performed from the river by boat, and the
5 inspectors shall follow the criteria in Condition II.O.1.c.
6
- 7 II.O.1.c. The Permittees shall visually inspect the areas identified in Conditions II.O.1.a. and
8 II.O.1.b. for malfunctions, deterioration, operator errors, and discharges which may
9 cause or lead to the release of dangerous waste constituents to the environment, or that
10 threaten human health. Specific items to be noted are as follows:
11
- 12 i. Remains of waste containers, labels or other waste management equipment;
 - 13
 - 14 ii. Solid waste disposal sites not previously identified for remedial action;
 - 15
 - 16 iii. Uncontrolled waste containers (e.g., orphan drums);
 - 17
 - 18 iv. Temporary or permanent activities that could generate an uncontrolled waste
19 form; and,
 - 20
 - 21 v. Unpermitted waste discharges.
 - 22
- 23 II.O.1.d. The Permittees shall notify the Department at least seven (7) days prior to conducting
24 these inspections in order to allow representatives of the Department to be present
25 during the inspections.
26
- 27 II.O.2. If the inspection by the Permittees conducted pursuant to Condition II.O.1. reveals any
28 problems, the Permittees shall take remedial action on a schedule agreed to by the
29 Department.
30
- 31 II.O.3. The inspection of high radiation areas will be addressed on a case-by-case basis in
32 either Part III of this Permit or prior to the inspections required in Condition II.O.1.
33
- 34 II.P. MANIFEST SYSTEM
35
- 36 II.P.1. The Permittees shall comply with the manifest requirements of WAC 173-303-370 for
37 waste received from off-site and WAC 173-303-180 for waste shipped off-site.
38
- 39 II.P.2. Transportation of dangerous wastes along State Highways 240, 24, and 243, and
40 Route 4 South (Stevens Drive) south of the Wye Barricade, if such routes are not
41 closed to general public access at the time of shipment, shall be manifested pursuant to
42 Condition II.P.1.
43
44

1 II.Q. ON-SITE TRANSPORTATION

2
3 II.Q.1. Documentation must accompany any on-site dangerous waste which is transported to
4 or from any TSD unit subject to this Permit through or within the 600 Area, unless the
5 roadway is closed to general public access at the time of shipment. Waste transported
6 by rail or by pipeline is exempt from this Condition. This documentation shall include
7 the following information, unless other unit-specified provisions are designated in Part
8 III or V.

9
10 II.Q.1.a. Generator's name, location and telephone number;

11
12 II.Q.1.b. Receiving TSD unit's name, location, and telephone number;

13
14 II.Q.1.c. Description of waste;

15
16 II.Q.1.d. Number and type of containers;

17
18 II.Q.1.e. Total quantity of waste;

19
20 II.Q.1.f. Unit volume/weight;

21
22 II.Q.1.g. Dangerous waste number(s); and,

23
24 II.Q.1.h. Any special handling instructions.

25
26 II.Q.2. All non-containerized solid, dangerous waste transported to or from TSD units subject
27 to this Permit shall be covered to minimize the potential for material to escape during
28 transport.

29
30 II.R. EQUIVALENT MATERIALS

31
32 II.R.1. The Permittees may substitute an equivalent or superior product for any equipment or
33 materials specified in this Permit. Use of equivalent or superior products shall not be
34 considered a modification of this Permit. A substitution will not be considered
35 equivalent unless it is at least as effective as the original equipment or materials in
36 protecting human health and the environment.

37
38 II.R.2. The Permittees shall place in the operating record (within seven (7) days after the
39 change is put into effect) the substitution documentation, accompanied by a narrative
40 explanation, and the date the substitution became effective. The Department may
41 judge the soundness of the substitution.

42
43 II.R.3. If the Department determines that a substitution was not equivalent to the original, it
44 will notify the permittees that the Permittees' claim of equivalency has been denied, of

the reasons for the denial, and that the original material or equipment must be used. If the product substitution is denied, the Permittees shall comply with the original approved product specification or find an acceptable substitution.

II.S. LAND DISPOSAL RESTRICTIONS

Unless specifically identified otherwise in the FFACO, the Permittees shall comply with all Land Disposal Restriction requirements as set forth in WAC 173-303-140.

II.T. ACCESS AND INFORMATION

To the extent that work required by this Permit must be done on property not owned or controlled by the Permittees, the Permittees must utilize their best efforts to obtain access and information at these locations.

II.U. MAPPING OF UNDERGROUND PIPING

II.U.1. Within 24 months of the effective date of the Permit, the Permittees shall submit a report to the Department which describes the procedures proposed to be used to compile the information required by Conditions II.U.2., II.U.3., and II.U.4. The report shall describe the methods which will be used to retrieve the piping information, the estimated accuracy of the data to be provided, quality assurance and/or quality control techniques to be employed including field verification activities (i.e., surveying, ground penetrating radar, etc.) to support information gathered from existing drawings, and conceptual examples of the product which will be submitted.

II.U.2. Within 36 months of the effective date of this Permit, the Permittees shall make an initial submittal to the Department of maps showing the location of dangerous waste underground pipelines (including active, inactive, and abandoned pipelines which contain or contained dangerous waste subject to the provisions of Chapter 173-303 WAC) on the Facility which are located outside of the fences enclosing the 200 East, 200 West, 300, 400, 100N, and 100K Areas. These maps shall identify the origin, destination, size, depth and type (i.e., reinforced concrete, stainless steel, cast iron, etc.) of each pipe and the location of their diversion boxes, valve pits, seal pots, catch-tanks, receiver tanks, and pumps, utilizing Washington State Plane Coordinates, NAD 83(91), meters. If the type of pipe material is not documented on existing drawings, the most probable material type shall be provided. These maps shall be accompanied by a description of the quality assurance and quality control measures used to compile the maps.

The age of all pipes required to be identified pursuant to this Condition shall be documented in an attachment to the submittal. If the age cannot be documented, an estimate of the age of the pipe shall be provided based upon best engineering judgement.

1 These maps, and any attachments, shall be maintained in the Facility Operating
2 Record and updated annually after the initial submittal with new or revised
3 information. Each map submittal required by this Condition shall incorporate
4 information available six months before the scheduled submittal date.
5

6 II.U.3. Within 48 months of the effective date of this Permit, the Permittees shall make an
7 initial submittal to the Department of piping schematics for dangerous waste
8 underground pipelines (including active, inactive, and abandoned pipelines which
9 contain or contained dangerous waste subject to the provisions of Chapter 173-303
10 WAC) within the 200 East, 200 West, 300, 400, 100N, and 100K Areas. The piping
11 schematics shall identify the origin, destination, and direction of flow for each pipe, as
12 well as whether the pipe is active, inactive, or abandoned. These schematics need not
13 include the pipes within a fenced tank farm or within a building/structure. These
14 schematics shall be accompanied by a description of the quality assurance and quality
15 control measures used to compile the maps.
16

17 These schematics and any attachments, shall be maintained in the Facility Operating
18 Record and updated annually after the initial submittal with new or revised
19 information. Each map submittal required by this Condition shall incorporate
20 information available six months before the scheduled submittal date.
21

22 II.U.4. Within 48 months of the effective date of this Permit, the Permittees shall make an
23 initial submittal to the Department of maps showing the location of dangerous waste
24 underground pipelines (including active, inactive, and abandoned pipelines which
25 contain or contained dangerous waste subject to the provisions of Chapter 173-303
26 WAC) within the 200 East, 200 West, 300, 400, 100N, and 100K Areas. These maps
27 will incorporate information available six months prior to the scheduled submittal date.
28 Thereafter, the maps will be updated on an annual basis to incorporate additional
29 information, as such information becomes available in accordance with the FFACO
30 milestone schedule. A schedule for the provision of map input shall be included in the
31 report specified in Condition II.U.1.
32

33 The maps shall identify the origin, destination, size, depth and type (i.e., reinforced
34 concrete, stainless steel, cast iron, etc.) of each pipe and the location of their diversion
35 boxes, valve pits, seal pots, catch tanks, receiver tanks, and pumps, and utilize
36 Washington State Plan Coordinates, NAD 83(91), meters. If the type of pipe material
37 is not documented on existing drawings, the most probable material type shall be
38 provided. These maps need not include the pipes within a fenced tank farm or within a
39 building/structure. These maps shall be accompanied by a description of the quality
40 assurance/quality control used to compile the maps.
41

42 The age of all pipes required to be identified pursuant to this Condition shall be
43 documented in an attachment to the submittal. If the age cannot be documented, an

1 estimate of the age of the pipe shall be provided based upon best engineering
2 judgement.

3
4 These maps, and any attachments, shall be maintained in the Facility Wide Operating
5 Record and updated annually after the initial submittal with new or revised
6 information.

7
8 **II.V. MARKING OF UNDERGROUND PIPING**

9
10 Within 36 months of the effective date of this Permit, the Permittees shall mark the
11 underground pipelines identified in Condition II.U.2. These pipelines shall be marked
12 at the point they pass beneath a fence enclosing the 200 East, 200 West, 300, 400,
13 100N or 100K Areas, at their origin and destination, at any point they cross an
14 improved road and every 100 meters along the pipeline corridor where practicable.
15 The markers shall be labeled with a sign that reads "Buried Dangerous Waste Pipe"
16 and shall be visible from a distance of 15 meters.

17
18 **II.W. OTHER PERMITS AND/OR APPROVALS**

19
20 **II.W.1.** The Permittees shall be responsible for obtaining all other applicable federal, state,
21 and local permits authorizing the development and operation of the Facility. To the
22 extent that work required by this Permit must be done under a permit and/or approval
23 pursuant to other regulatory authority, the Permittees shall use their best efforts to
24 obtain such permits. Copies of all documents relating to actions taken, pursuant to this
25 Condition, shall be kept in the operating record.

26
27 **II.W.2.** All other permits related to dangerous waste management activities are severable and
28 enforceable through the permitting authority under which they are issued.

29
30 **II.W.3.** All air emissions from TSD units subject to this Permit shall comply with all
31 applicable State and Federal regulations pertaining to air emission controls, including
32 but not limited to, Chapter 173-400 WAC, General Regulations for Air Pollution
33 Sources; Chapter 173-460 WAC, Controls for New Sources of Toxic Air Pollutants;
34 and Chapter 173-480 WAC, Ambient Air Quality Standards and Emission Limits for-
35 Radionuclides.

36
37 **II.X. SCHEDULE EXTENSIONS**

38
39 **II.X.1** The Permittees shall notify the Department in writing as soon as possible of any
40 deviations or expected deviations from the schedules of this Permit. The Permittees
41 shall include with the notification all information supporting their claim that they have
42 used best efforts to meet the required schedules. If the Department determines that the
43 Permittees have made best efforts to meet the schedules of this Permit, the Department
44 shall notify the Permittees in writing by certified mail that the Permittees have been

1 granted an extension. Such an extension shall not require a permit modification under
2 Condition I.C.3. Should the Department determine that the Permittees have not made
3 best efforts to meet the schedules of this Permit, the Department may take such action
4 as deemed necessary.
5

6 Copies of all correspondence regarding schedule extensions shall be kept in the
7 operating record.
8

9 II.X.2

10 Any schedule extension granted through the approved change control process identified
11 in the FFACO shall be incorporated into this Permit. Such a revision shall not require
a Permit modification under Condition I.C.3.

PART III - UNIT-SPECIFIC CONDITIONS FOR FINAL STATUS OPERATIONS

CHAPTER 1

616 Nonradioactive Dangerous Waste Storage Facility

The 616 Nonradioactive Dangerous Waste Storage Facility (NRDWSF) is an active storage unit for dangerous wastes that are shipped to off-site commercial treatment or disposal facilities. This Chapter sets forth the operating Conditions for this TSD unit.

III.1.A. COMPLIANCE WITH APPROVED PERMIT APPLICATION

The Permittees shall comply with all the requirements set forth in the *616 Nonradioactive Dangerous Waste Storage Facility Permit Application, Rev. 2*, as found in Attachment 8, including the amendments specified in Condition III.1.B. Enforceable portions of the application are listed below (All subsections, figures, and tables included in these portions are also enforceable unless stated otherwise):

Part A Application

Section 2.1.3	The 616 Non-radioactive Dangerous Waste Storage Facility Description
Section 2.2	Topographic Maps
Section 2.5	Performance Standards
Section 2.7.1	Spills and Discharges Into the Environment
Section 2.8	Manifest System
Chapter 3.0	Waste Characteristics
Chapter 4.0	Process Information
Chapter 6.0	Procedures to Prevent Hazards
Chapter 7.0	Contingency Plan
Chapter 8.0	Personnel Training
Chapter 11.0	Closure and Post-Closure Requirements

Chapter 12.0	Reporting and Recordkeeping
Section 13.7	Toxic Substance Control Act of 1976
Section 13.8	Other Requirements
Appendix 2A	Drawing H-13-000014, 616 NRDWSF Topographic Map
Appendix 4B	Drawing H-6-1553, Architectural Plan, Elevations and Sections, Rev. 3
Appendix 4B	Drawing H-6-1556, Structural Plan and Sections, Rev. 2
Appendix 7A	Building Emergency Plan - 616 Building
Appendix 11B	Description of Procedures

III.1.B. AMENDMENTS TO THE APPROVED PERMIT APPLICATION

- III.1.B.a. Page 2-7, line 25. The words "can be" are changed to "shall be."
- III.1.B.b. Page 2-16, line 45. An additional bullet is added to the text which reads as follows:
"In addition, all reporting requirements identified in Conditions I.E.15. through I.E.22. of this Permit shall be complied with."
- III.1.B.c. Page 2-17, line 24. The word "voluntarily" is deleted from the text.
- III.1.B.d. Page 2-17, line 26. The words "information on" is changed to "requirements for."
- III.1.B.e. Page 3-6, line 44. The term "Table 3-3" is deleted and replaced with "Sections 3.2.2 through 3.2.4 and 3.2.6".
- III.1.B.f. Page 3-7, lines 8-11. These lines are deleted and replaced with the following:
- Prior to acceptance of wastes at 616 NRDWSF, confirmation of designation may be required by solid Waste Engineering (Section 3.2.4). The Wastes which shall undergo confirmation of designation are identified in Condition III.1.B.n. of this Permit and may be divided into two groups; those that easily yield a representative sample (Category I), and those that do not (Category II). The steps for each type are outlined below along with a description of which wastes fall into each category:
- Category I. If a waste which easily yields a representative sample is received a representative sample will be taken of the waste. If more than one phase is present, each phase must be tested individually. The following field tests will be performed:

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- * Reactivity - HAZCAT™ oxidizer, cyanide, and sulfide tests. These tests will not be performed on materials known to be organic peroxides, ethers, and/or water reactive compounds.
- * Flashpoint/explosivity - by HAZCAT™ flammability procedure, explosive atmosphere meter¹, or a closed cup flashpoint measurement instrument¹.
- * pH - by pH meter¹ or pH paper (SW-846-9041).² This test will not be performed on non-aqueous materials.
- * Halogenated organic compounds - by Chlor-D-Tect™ kits.
- * Volatile organic compounds - by photo or flame ionization tester¹, by gas chromatography with or without mass spectrometry, or by melting point and/or boiling point determination.

¹These instruments are field calibrated or checked for accuracy daily when in use.

²The pH paper must have a distinct color change every 0.5 pH unit and each batch of paper must be calibrated against certified pH buffers or by comparison with a pH meter calibrated with certified pH buffers.

If the waste meets the parameters specified in its documentation, within a 10% tolerance, confirmation of designation is complete. If it does not meet these parameters, sample and analyze the materials in accordance with WAC 173-303-110. See Table 3-4 for a list of analytical methodologies and Table 3-5 for sampling methodologies. This is considered a significant error under Section 3.2.4. Re-assess and re-designate the waste. Repackage and label as necessary or return to the generating unit.

When mathematically possible, the Permittees shall perform confirmation on an equal number of Category I and Category II containers.

Category II. If a representative sample is not easily obtained (for example, discarded machinery or shop rags) or if the waste is a labpack or discarded laboratory reagent container, the following steps will be performed:

- a. Visually verify the waste. Labpacks and combination packages must be removed from the outer container. If the waste meets the parameters specified in its documentation, confirmation of designation is complete. If it does not meet these parameters, proceed to the next step. This is considered a significant error under Section 3.2.4.

b. If possible and necessary, segregate/repackage the waste for shipment in a compliant manner. If the waste is not packaged in compliance with shipping requirements, proceed to the next step.

c. The waste must be re-designated using designation methods identified in WAC 173-303-070 through 173-303-100."

III.1.B.g. Page 3-7, line 17. The following line is added: "Petitions to use an alternate test method shall be submitted in accordance with WAC 173-303-910."

III.1.B.h. Page 3-7, line 18. The following paragraph is added: "All analytical tests performed to fulfill the requirements of Sections 3.2.4 and 4.1.1.8 (Frequency of Analysis and Removal of Liquids from Containment System, respectively) shall be performed in accordance with WAC 173-303-110. New test methods shall be used within 90 days of the effective date of the State regulations or laws that mandate the use of the test method. To ensure analytical quality control, all analyses must fulfill, at a minimum, the quality procedures specified in SW-846 Volume II."

III.1.B.i. Page 3-7, line 33. The words "is adequate" are deleted and replaced with "must be adequate."

III.1.B.j. Page 3-7, line 35. The words "is performed" are deleted and replaced with "must be performed."

III.1.B.k. Page 3-7, line 40. The word "representative" is inserted between the words "obtaining" and "samples."

III.1.B.l. Page 3-8, line 1. The following sentence is inserted before the word "Appropriate": "To ensure sample quality control, all sampling efforts must, at a minimum, be in accordance with the procedures specified in WAC 173-303-110."

III.1.B.m. Page 3-8, line 1. "Appropriate preservation" is deleted and replaced with "Appropriate packaging and preservation."

III.1.B.n. Page 3-8, line 8. The following paragraph is added:

"At least five percent (5%) of the waste containers stored at 616 NRDWSF during a Federal fiscal year (October 1 through September 30) will undergo confirmation of designation pursuant to Sections 3.2.2 and 3.2.3 (Test Methods and Sampling Methods, respectively). The number of containers to meet the five percent (5%) requirement is the average of containers for the previous three months. For example, if 200 containers are received in January, 180 in February, and 220 in March then 10 containers of inbound waste must undergo confirmation of designation in April. All generating units which ship more than twenty (20) containers through 616 NRDWSF

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- 1 in a fiscal year will have at least one (1) container sampled and analyzed. Containers
2 for which there is insufficient process knowledge or analytical information to designate
3 without sampling and analysis may not be counted as part of the five percent (5%)
4 requirement unless there is additional confirmation of designation independent of the
5 generator designation. The generating unit's staff shall not select the waste containers
6 to be sampled and analyzed other than identifying containers for which insufficient
7 information is available to designate."
8
- 9 III.1.B.o. Page 3-8, line 20. Delete the first sentence of the paragraph and replace it with the
10 following: "To be acceptable at 616 NRDWSF, samples of non-radioactive waste
11 streams must be documented to have been sent to a laboratory for waste profiling
12 when newly identified or whenever the process used or raw materials usage changes,
13 and at least annually thereafter, to ensure that the waste designation assigned by the
14 Solid Waste Engineering staff (Section 3.2) is accurate and in compliance with land
15 ban restrictions."
16
- 17 III.1.B.p. Page 3-8, line 29. The words "For two months" are deleted and replaced with "For the
18 next six shipments or two months, whichever is longer, to 616 NRDWSF."
19
- 20 III.1.B.q. Page 3-8, line 32. The following line is added to the end of the paragraph: "The
21 laboratory verification results shall be obtained in accordance with WAC 173-303-
22 110."
23
- 24 III.1.B.r. [Reserved]
25
- 26 III.1.B.s. Page 4-5, line 4. Add the following after the word "performed": "after determination
27 by the Building Emergency Director (BED) that implementation of the Contingency
28 Plan pursuant to Appendix 7A is not necessary or all necessary actions in accordance
29 with the Contingency Plan have been implemented. Either case must be recorded and
30 signed in the TSD unit-specific operating record by the BED."
31
- 32 III.1.B.t. [Reserved]
33
- 34 III.1.B.u. Page 4-5, line 32. The following sentence is added: "The 616 NRDWSF staff will -
35 ensure that waste is properly packaged, labeled, marked, and stored."
36
- 37 III.1.B.v. Page 4-5, line 46. The sentence "Wherever possible, organic free water will be used as
38 the collection medium to minimize the generation of additional dangerous waste." is
39 deleted.
40
- 41 III.1.B.w. Page 4-5, line 46. The following sentence is added after "spilled material": "All
42 samples taken to verify that the site of a release is clean will be obtained in accordance
43 with the applicable standards of Section 11.1.5. et seq."
44

- 1 III.1.B.x. Figure 6-2, Section 2.0, Hallway. Revise the checklist to read "Protective equipment
2 supply present per the emergency equipment list." This equipment shall be
3 individually inspected and documented by type, and be in adequate condition, and in
4 the quantities listed. The revised checklist shall be submitted for approval to the
5 Department within 30 days of the effective date of this Permit.
6
- 7 III.1.B.y. Page 8-28, lines 5 through 8. These lines are deleted.
8
- 9 III.1.B.z. Chapter 11. All sampling and analyses necessary for soils underneath a contaminated
10 concrete layer must be performed prior to removal of the overlying concrete. All soils
11 which exceed the clean closure standards of WAC 173-303-610(2)(b) shall be
12 managed in a manner analogous to that for contaminated surrounding soil as described
13 in Chapter 11 of Attachment 8.
14
- 15 III.1.B.aa. Page 11-2, line 1. The words "In general," are deleted from the text. The "t" on
16 "these" is capitalized to read "These".
17
- 18 III.1.B.bb. Table 11-1, page T11-1. In addition to the analyses in Table 11-1, the concrete
19 samples shall also be analyzed for all dangerous waste constituents documented to
20 have been spilled at the 616 NRDWSF during its operating life. These analyses shall
21 be performed in accordance with WAC 173-303-110 including the quality assurance
22 and quality control requirements delineated in SW-846. Action levels shall be based
23 on the level of quantitation for each analyte. Final decisions based on health based
24 standards shall be subject to approval or rejection by the Department.
25
- 26 III.1.B.cc. Page 12-5, line 28. Replace the words "via line management, that the" with "via line
27 management, when the".
28
- 29 III.1.B.dd. Page 12-5, line 41. The words, "outside the Hanford Facility" are deleted.
30
- 31 III.1.B.ee. Page 12-12, line 16. The last two sentences of this paragraph are deleted.
32
- 33 III.1.B.ff. Table 12-1 "Reports and Records." A definition of the footnote "a" is added to the
34 bottom of the table as follows:
35
- 36 "a Hanford Facility means the reports and records are available through the Facility
37 Regulatory File index pursuant to Section 12.0. Until the index is implemented,
38 reports and records will be available at the Facility, but not necessarily at the 616
39 NRDWSF.
40
- 41 616 NRDWSF means the reports and records are available at the 616 NRDWSF
42 office."
43

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III.1.B.gg. Chemical, biological, and physical analyses of the dangerous waste to be handled at 616 NRDWSF pursuant to WAC 173-303-806(4)(a), entitled "616 Nonradioactive Dangerous Waste Facility Off-Site Shipping Lists," is found in Attachment 9 of this Permit.

III.1.B.hh. The description of procedures as referenced in Appendix 11B are provided in various sections of *Procedure Description*, January 13, 1991 (Attachment 10). The specific sections of Attachment 10 which are incorporated into the Permit are listed in Table III-1, below, by procedure. No part of Attachment 10 shall supersede any part of Attachment 8.

Number	Procedure	Pages	Sections
11B-1	Preparing Health and Safety Plan	1-4	1.0, 2.0, 3.0, 4.2, 5.0, 5.1, 5.2, 6.0, 6.1, 6.2
11B-2	Decontaminating Sampling Equipment	23-24	1.0, 2.0, 3.0, 5.2, 5.3, 6.1, 6.2, 6.3
11B-3	Evaluating Data	25-26, 28-29	1.0, 2.0, 3.0, 4.7, 5.0
11B-4	Packaging Samples	32-35	1.0, 4.0, 4.1, 5.0, 5.1, 5.2
11B-5	Soil and Sediment Sample Containers	6-11	1.0, 3.0, 4.2, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8
11B-6	Ensuring Quality Control of Records and Documentation	70-77	1.0, 3.0, 4.0, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 6.0, 6.2, 6.3, 6.4, 6.5, 6.6
11B-7	Maintaining a Field Logbook	44-48	1.0, 3.0, 5.0, 5.1, 5.1.1, 5.1.2, 5.1.3, 5.1.4, 5.1.5, 6.0, 6.1, 6.2, 7.0
11B-8	Chain-of-Custody	39-43	1.0, 3.0, 4.0, 4.1, 4.2, 4.3, 4.4, 4.5, 5.0, 6.0, 6.1, 6.2, 6.3, 6.4, 6.5, 6.7
11B-9	Controlling Unknown Suspected Waste	49-59	1.0, 3.0, 4.1, 4.2, 4.3, 4.4, 4.5, 5.0, 5.1, 5.2, 6.0, 6.1, 6.2, 6.3, 6.4, 6.6, 6.7, 6.8, 6.9, 6.10, 6.11
11B-10	Deviating from Procedures Used During Closure	60-64	1.0, 2.0, 4.0, 4.2, 5.0, 5.1, 5.2, 5.2.1, 5.2.2, 5.3

Table III-1: Procedures from Attachment 10.

III.1.B.ii. All instances where the emergency response number is cited as "811" shall be changed to "911."

- 1 III.1.B.jj. Part A Application, page 4 of 24, lines 18 and 19. Waste Code WC01 shall be deleted
2 and the estimated annual volume of Waste Code WC02 shall be changed to 55,000
3 kilograms.
4
- 5 III.1.B.kk. Page 2-8, line 3. The following sentence shall be added: "A mechanical fork truck lift
6 and associated safety equipment (guards, handrails, etc.) are mounted on the
7 containment pad. Design drawings of the mechanical fork truck lift are provided in
8 Appendix 4B."
9
- 10 III.1.B.ll. Page 2-16, lines 30 and 32. The address "7601 West Clearwater, Suite 102" shall be
11 changed to "1315 West Fourth Avenue" and the telephone number "509-546-2990"
12 shall be changed to "509-735-7581."
13
- 14 III.1.B.mm. Page 2-18, line 38. The following bullet shall be added: "• Evidence tape from field
15 verified waste is untampered."
16
- 17 III.1.B.nn. Page 3-1, lines 12 through 14. The sentence beginning with "Nonradioactive
18 dangerous waste . . ." shall be deleted and replaced with the following: "The 616
19 NRDWSF stores nonradioactive dangerous waste that is received from generating
20 units located on the contiguous Hanford Facility and from DOE-RL owned and
21 operated generators located on noncontiguous areas near the Hanford Facility (e.g.,
22 Federal Building and 712 Building in downtown Richland and the 3000 Area). This
23 waste is stored at the 616 NRDWSF until it is transported to an offsite TSD facility."
24
- 25 III.1.B.oo. Page 3-1, line 20. The term "onsite" shall be deleted and replaced with "DOE-RL
26 owned and operated."
27
- 28 III.1.B.pp. Page 3-1, lines 21 and 22. The sentence "Shipments are made from onsite generating
29 units to the 616 NRDWSF." shall be deleted.
30
- 31 III.1.B.qq. Page 3-1, line 22. The term "onsite" shall be deleted and replaced with "Hanford
32 Site." On line 26, the term "generated onsite" shall be deleted.
33
- 34 III.1.B.rr. Page 3-2, lines 14 and 19. The term "Onsite" shall be deleted.
35
- 36 III.1.B.ss. Page 3-3, lines 31 through 39. The paragraph on these lines shall be deleted.
37
- 38 III.1.B.tt. Page 3-4, lines 3 and 16. The term "onsite" shall be deleted.
39
- 40 III.1.B.uu. Page 3-5, lines 19, 36, 38, and 44. The term "onsite" shall be deleted.
41
- 42 III.1.B.vv. Page 3-6, lines 13, 15, 19, 23, and 24. The term "onsite" shall be deleted.
43
- 44 III.1.B.ww. Page 3-7, line 32. The term "suction pump," shall be added after the word "device."

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- 1 III.1.B.xx. Page 3-8, line 8. The term "onsite" shall be deleted.
2
3 III.1.B.yy. Page 3-8, lines 37 through 40. The paragraph on these lines shall be deleted and
4 replaced with the following: "All waste received at the 616 NRDWSF, as described in
5 Section 3.1, is subject to the confirmation of designation sampling requirements
6 described in Section 3.2. Each shipment of waste received at the 616 NRDWSF must
7 be accompanied by accurate and complete waste tracking forms for waste received
8 from onsite sources and uniform hazardous waste manifests for waste received from
9 offsite sources."
10
11 III.1.B.zz. Page T4-2, line 31. The word "cabinet" shall be replaced with "cabinet(s)."
12
13 III.1.B.aaa. Page T4-2, line 34. The following option shall be added: "or 34 (55 gal) 34 (30 gal)
14 (208.2 liters) (113.6 liters) 2 Flammable liquid storage cabinets (170 gal) (1,024
15 liters."
16
17 III.1.B.bbb. Page APP 4B-ii. On line 12, the term "Rev. 2" shall be replaced with "Rev. 4." At
18 line 13, the following shall be added:
19
20 "ECN 191786 (10/28/93)
21 ECN 176589 (11/16/93)
22 ECN 605639 (01/17/94)
23 ECN 605649 (08/01/94)"

CHAPTER 2

305-B Storage Facility

The 305-B Storage Facility (305-B) is an active storage unit for dangerous wastes and mixed wastes. These wastes are derived primarily from research and development activities and laboratory activities in the 300 Area. This Chapter sets forth the operating Conditions for this TSD unit.

III.2.A. COMPLIANCE WITH APPROVED PERMIT APPLICATION

The Permittees shall comply with all the requirements set forth in the 305-B Storage Facility Dangerous Waste Permit Application, as found in Attachment 18 including the amendments specified in Condition III.2.B. Enforceable portions of the application are listed below (All subsections, figures, and tables included in these portions are also enforceable unless stated otherwise):

Part A Application

Section 2.1.2	The 305-B Storage Unit
Section 2.2.1	General Requirement
Section 2.5	Performance Standard
Section 2.6	Buffer Monitoring Zones
Section 2.8	Manifest System
Chapter 3.0	Waste Characteristics
Chapter 4.0	Process Information
Chapter 6.0	Procedures to Prevent Hazards
Chapter 7.0	Contingency Plan
Chapter 8.0	Personnel Training
Chapter 11.0	Closure and Postclosure Requirements
Chapter 12.0	Reporting and Recordkeeping

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Section 13.8 Toxic Substances Control Act

Section 13.9 Other Requirements

Appendix 2A Hanford Site and 300-Area Topographic Maps, Plates 2-2
Through 2-9

III.2.B. AMENDMENTS TO THE APPROVED PERMIT APPLICATION

III.2.B.a. For all shipments of dangerous waste to or from this TSD unit, except for shipments which occur wholly within the 300 Area, the Permittees shall comply with Conditions II.P. and II.Q. of this Permit regarding dangerous waste shipment manifesting and transportation.

III.2.B.b. Page 3-5, line 41. The following text is added: "The 305-B personnel shall collect from the generating unit(s) the information pursuant to 40 CFR 268.7(a) regarding Land Disposal Restricted (LDR) wastes, the appropriate treatment standards, whether the waste meets the treatment standards, and the certification that the waste meets the treatment standards, if necessary, as well as any waste analysis data that supports the generator's determinations. If this information is not supplied by the generating unit, then the 305-B personnel shall be responsible for completion and transmittal of all subsequent information regarding LDR wastes, pursuant to 40 CFR 268.7(b). All waste streams must be re-characterized at least annually, or when generating unit and/or 305-B personnel have reason to believe the waste stream has changed, to determine compliance with LDR requirements in 40 CFR 268."

III.2.B.c. Page 3-9, line 16. The following is added to the end of this section: "Storage limits for all chemicals are listed in Table 4-1, page 4-18, and 4-19 (Uniform Building Code, Table numbers 9-A and 9-B). This table is incorporated into this section by reference."

III.2.B.d. Page 3-10, line 27. The following paragraphs are inserted into this section:

Prior to acceptance of wastes at 305-B, confirmation of designation may be required (Section 3.2.4). The Wastes which shall undergo confirmation of designation are identified in Condition III.2.B.f. of this Permit and may be divided into two groups; those that easily yield a representative sample (Category I), and those that do not (Category II). The steps for each type are outlined below along with a description of which wastes fall into each category:

Category I. If a waste which easily yields a representative sample is received a representative sample will be taken from the waste containers selected. If more than one phase is present, each phase must be tested individually. The following field tests will be performed:

- * Reactivity - HAZCAT™ oxidizer, cyanide, and sulfide tests. These tests will not be performed on materials known to be organic peroxides, ethers, and/or water reactive compounds.
- * Flashpoint/explosivity - by HAZCAT™ flammability procedure, explosive atmosphere meter¹, or a closed cup flashpoint measurement instrument¹.
- * pH - by pH meter¹ or pH paper (SW-846-9041).² This test will not be performed on non-aqueous materials.
- * Halogenated organic compounds - by Chlor-D-Tect™ kits.
- * Volatile organic compounds - by photo or flame ionization tester¹, by gas chromatography with or without mass spectrometry, or by melting point and/or boiling point determination.

¹These instruments are field calibrated or checked for accuracy daily when in use.

²The pH paper must have a distinct color change every 0.5 pH unit and each batch of paper must be calibrated against certified pH buffers or by comparison with a pH meter calibrated with certified pH buffers.

If the sample data observed meets the parameters specified in its documentation, within a 10% tolerance, confirmation of designation is complete and the waste may be accepted. If not, the waste is rejected and returned to the generating unit, and sampling and analysis of the waste is required to be included with a resubmitted CD/RR.

When mathematically possible, the Permittees shall perform confirmation on an equal number of Category I and Category II containers.

Category II. If a representative sample is not easily obtained (for example, discarded machinery or shop rags) or if the waste is a labpack or discarded laboratory reagent container, the following steps will be performed:

- a. Visually verify the waste. Examine each selected container to assure that it matches the data provided on the CD/RR form(s) provided to document the waste. Labpacks and combination packages must be removed from the outer container. If the waste matches the description specified in its documentation, confirmation of designation is complete and the waste may be accepted. If not, the waste is rejected and returned to the generating unit, and the generating unit revises and resubmits the documentation to reflect the actual contents. If necessary, the waste shall be re-designated utilizing the designation methods identified in WAC 173-303-070 through 173-303-100."

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- 1 III.2.B.e. Page 3-10, line 32. The following is added to the end of this section: "Wastes must be
2 analyzed using the TCLP in accordance with Appendix II of 40 CFR 261, as
3 amended, in order to provide sufficient information for proper management and for
4 decisions regarding Land Disposal Restrictions pursuant to 40 CFR 268."
5
- 6 III.2.B.f. Page 3-16, lines 24-28. Replace the existing language with: "At least five percent
7 (5%) of the waste containers received at 305-B during a Federal fiscal year (October 1
8 through September 30) will undergo confirmation of designation pursuant to Sections
9 3.2.2 and 3.2.3 (Test Methods and Sampling Methods, respectively). The number of
10 containers needed to meet the 5% requirement is 5% of the average of containers for
11 the previous three months. For example if 200 containers are received in January, 180
12 in February, and 220 in March, then 10 containers of received waste must undergo
13 confirmation of designation in April. All generating units which ship more than twenty
14 (20) containers through 305-B in a fiscal year will have at least one (1) container
15 sampled and analyzed. Containers for which there is insufficient process knowledge or
16 analytical information to designate without sampling and analysis may not be counted
17 as part of the five percent requirement unless there is additional confirmation of
18 designation independent of the generator designation. The generating unit's staff shall
19 not select the waste containers to be sampled and analyzed other than identifying
20 containers for which insufficient information is available to designate.
21
- 22 Containers of the following are exempt from the confirmation calculation above:
23 Laboratory reagents or other unused products such as paint, lubricants, solvent, or
24 cleaning products, whether received for redistribution, recycling, or as waste. To
25 qualify for this exemption, such materials must be received at 305-B in their original
26 containers."
27
- 28 III.2.B.g. Page 4-1, line 30. "and -630" is added after "WAC 173-303-190" in this sentence.
29
- 30 III.2.B.h. Page 4-1, line 45. Added to the end of this section is the following sentence:
31 "Containers utilized for off-site shipment shall also comply with WAC 173-303-
32 190(2) and (3). 305-B personnel shall comply with WAC 173-303-190(4)."
33
- 34 III.2.B.i. Page 4-24, line 21. The following paragraph is added to the end of Section 4.1.1.8.: -
35 "Verification sampling shall be carried out in accordance with Section 11.1.4.4.
36 (Methods for sampling and testing to demonstrate success of decontamination)."
37
- 38 III.2.B.j. Page 7-3, line 1. This line is deleted.
39
- 40 III.2.B.k. Page 7-3, line 28. The following is added to the end of this Section: "The names and
41 work phone numbers of the 305-B Emergency Coordinator(s) shall be submitted to
42 Ecology and the Agency and kept at the Single Point contact and with the contingency
43 plan at the 305-B Unit."
44

- 1 III.2.B.l. Page 7-6, line 2. The following is added to this Section: "Samples of spilled or
2 released material(s) shall be taken in accordance with the WAP found in Section 3.2."
3
- 4 III.2.B.m. Page 7-13, line 46. Added to the end of the second to last sentence is the following:
5 "pursuant to WAC 173-303-360(2)(j)."
6
- 7 III.2.B.n. Page 7-23, line 35. The following bullet is added to this Section: "All local police and
8 fire departments, hospitals, and State and local response teams that may be called
9 upon to provide emergency services."
10
- 11 III.2.B.o. Page 8-2, line 28. The "I"s are replaced by "B"s on this line, changing the training
12 frequency for Hazardous Waste Shipment Certification from initially to biennially.
13
- 14 III.2.B.p. Page 8-2, line 30. A "B⁴" is inserted replacing the "N" under the vertical column for
15 TS (Waste Management Technicians and Technical Specialists), requiring that they
16 receive Radioactive Material Shipping Representative training biennially. Footnote 4
17 shall be changed to read: "Required for staff directly responsible for radioactive
18 material shipments."
19
- 20 III.2.B.q. Page 11-1, line 44. Added to the end of this Section is the following: "Spill reports
21 and logs shall be consulted to determine potential areas of contamination."
22
- 23 III.2.B.r. Page 11-3, line 51. Prior to the words "will also be performed.", the following is
24 added: "or areas of documented spills or releases."
25
- 26 III.2.B.s. Page 11-8, lines 4 and 7. The following language is inserted after the words Low-
27 Level Radioactive on line 4 and Nonregulated on line 7, respectively, replacing the
28 current language: "Shall be handled in accordance with the Liquid Effluent Consent
29 Order (No. DE 91NM-177) and Milestone M-17 of the Hanford Federal Facility
30 Agreement and Consent Order."
31
- 32 III.2.B.t. Page 11-8, line 25. Prior to the words "...will also be performed", the following is
33 added: "or areas of documented spills or releases".
34
- 35 III.2.B.u. Page 11-13, line 39. The words "annually during closure activities" are deleted from
36 the end of this sentence and replaced with: "in accordance with Condition II.H.1." of
37 this Permit.
38
- 39 III.2.B.v. Page 12-1, lines 7-9. The sentence beginning "Many of the records..." is deleted.
40
- 41 III.2.B.w. [Reserved]
42
- 43 III.2.B.x. Page 12-10, line 37. Added to the end of this sentence is the following: "and Condition
44 I.E.15. of the Facility Wide Permit."

- 1 III.2.B.y. [Reserved]
2
3 III.2.B.z. [Reserved]
4
5 III.2.B.aa. Page 13-2, line 42. This sentence is deleted and replaced with the following: "Wastes
6 containing polychlorinated biphenyls (PCB), which are subject to regulation under the
7 Toxic Substances Control Act (TSCA), are stored in the 305-B Storage Unit. These
8 wastes are stored for periods less than one (1) year before shipment to a disposal
9 facility permitted under TSCA. Storage of PCB wastes in 305-B for periods less than
10 one (1) year will continue to be done in compliance with applicable TSCA regulations
11 in 40 CFR Part 761."
12
13 III.2.B.bb. Part A Application, Page 3Q of 5, lines 10 and 11. Waste Code WC01 shall be
14 deleted and the estimated annual volume of Waste Code WC02 shall be changed to
15 2,000 kilograms.
16
17 III.2.B.cc. Page 2-15, lines 30 and 31. The term "1988" shall be changed to "1991."
18
19 III.2.B.dd. Page 4-17, lines 23-36. The text on these lines shall be deleted and replaced with the
20 following: "4.1.1.6.11 RMW Storage Area. Radioactive mixed waste that is not
21 flammable per UFC (i.e., flash point above 100 degrees F) is stored in a special area in
22 the basement of 305-B. For additional segregation capability, there are six small
23 chemical storage cabinets and four 5 ft. X 5 ft. stainless steel "container pans" with 12
24 in. sides. The containment pans are mounted to the floor or wall of the cell to provide
25 segregated storage for potentially incompatible mixed waste streams. Drums stored in
26 this are stored on pallets to prevent potential contact with spilled waste in containment
27 during an emergency. A diagram of this area is provided in Figure 4-9."
28
29 In normal use, the storage capacity of this area is limited by the radionuclide limits
30 imposed by the DOE for "low inventory facilities." These limitations are defined in
31 DOE-STD-1027-92, Hazard Characterization and Accident Analysis Techniques for
32 Compliance with DOE Order 5480.23, Nuclear Safety Analysis Reports, and are
33 included in the radiation work permit for the mixed waste storage area."
34
35 III.2.B.ee. Page 6-1, lines 46-52. The paragraph beginning with the word "Access" shall be
36 deleted.
37
38 III.2.B.ff. Page 6-3, lines 15-18. The first two sentences of this paragraph shall be deleted.
39
40 III.2.B.gg. Page 6-16, lines 15-19. The first five bullets shall be deleted and replaced with the
41 following: "• 6 sets of chemically resistant suits, aprons, boots, and gloves."
42
43 III.2.B.hh. Page 7-17, lines 5-9. The first five bullets shall be deleted and replaced with the
44 following: "• 6 sets of chemically resistant suits, aprons, boots, and gloves."

1 III.2.B.ii. Page 8-3, line 24. The following shall be added to the text: "Equivalent training may
2 be taken in place of the training identified in Figure 8-1 with approval from the 305-B
3 Unit Operating Supervisor or the Waste Management Section Manager.
4 Documentation of the training substitution will be placed in the operating record
5 (within seven (7) days after the training was received) accompanied by a narrative
6 explanation, and the date of the training. The documentation shall be made available
7 to the Department or EPA during inspections for assessment. If the Department or
8 EPA determines that the training substitution was not equivalent to the original, the
9 original training will be taken or an acceptable substitution will be found."

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PART IV - CORRECTIVE ACTIONS FOR PAST PRACTICES

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The HSWA Permit is issued by the Agency in conjunction with this Permit. Upon delegation of the Corrective Action requirements of the HSWA by the Agency to the Department, the Permit shall be modified to incorporate the specific requirements of the HSWA Permit into this Permit. This modification shall be considered a Class 3 modification in accordance with Condition I.C.3. Until this modification is complete, compliance with the terms of the referenced provisions, shall be deemed as compliance with WAC 173-303-646.

PART V - UNIT-SPECIFIC CONDITIONS FOR UNITS UNDERGOING CLOSURE

CHAPTER 1

183-H Solar Evaporation Basin

The 183-H Solar Evaporation Basins (Basins) comprise an inactive TSD unit that is currently undergoing permanent closure activities. This TSD unit was operated as an evaporation treatment unit for dangerous wastes. This Chapter sets forth the closure requirements for this TSD unit.

V.1.A. COMPLIANCE WITH APPROVED CLOSURE PLAN

The Permittees shall comply with all requirements set forth in the *183-H Solar Evaporation Basins Closure Plan/Postclosure Plan* (Plan), found in Attachment 11, including the amendments specified in Condition V.1.B. Enforceable portions of the Plan are listed below (All subsections, figures, and tables included in these portions are also enforceable unless stated otherwise):

Part A Application

Section I. General Closure Requirements, Introduction (Pages I-1 through I-6)

Section I.A-1. Minimize Need for Post-Closure Maintenance and Controls

Section I.A-2. Minimize Post-Closure Escape of Dangerous Waste

Section I.B. Content of Closure Plan

Section I.C. Certification of Closure, Survey Plat, Notice in Deed, and Financial Requirements

Section II.B-1. Preliminary Cover Design

Section III.A-1. Inspection Plan

Section III.A-2g. Monitoring Plan Proposed to be Conducted Until Issuance of Final Status Post-Closure Permit

Section III.A-3. Maintenance Plan

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1	Section III.B.	Personnel Training
2		
3	Section III.C.	Proccdures to Prevent Hazards
4		
5	Section III.D.	Post-Closure Contact
6		
7	Section III.E.	Amendment of Post-Closure Plan
8		
9	Section III.F.	Certification of Completion of Post-Closure Care
10		
11	Appendix A	Topographical Maps
12		
13	Appendix L	Procedures for Sample Collection, Chain of Custody, and
14		Field Measurements
15		
16	Appendix M	Analytical Methods and Quality Control Procedures
17		
18	Appendix N	Personnel Training for Closure Activities
19		
20	V.1.B.	<u>AMENDMENTS TO THE APPROVED CLOSURE PLAN</u>
21		
22	V.1.B.a.	Page I-1, lines 9-12. The sentence found here is deleted and replaced with the
23		following: "Additionally, the 183-H Basins will be closed in accordance with the most
24		current version of all applicable environmental regulations and laws as well as the
25		FFACO. New or modified regulations and laws may require closure activities and/or
26		the closure plan to be modified."
27		
28	V.1.B.b.	Page I-108, line 46. The reference to WAC 173-303-700 is deleted.
29		
30	V.1.B.c.	Page I-150, line 53. The date of "October 1991" is deleted and replaced with "the first
31		October after the effective date of this Permit".
32		
33	V.1.B.d.	Page III-77, line 5. The phone number (509) 376-5411 is changed to (509) 375-4647.
34		
35	V.1.B.e.	A copy of any Unusual Occurrence Report or Off Normal Occurrence Report issued
36		after approval of the Plan which is directly related to Basin closure shall be provided
37		to the Department's Basin unit manager within seven (7) days after issuance. This
38		does not relieve the Permittees from any other reporting requirements specified in Part
39		I or II of this Permit.
40		
41	V.1.B.f.	Annual closure cost estimates shall be provided to the Department as described in
42		Section I.C.4. of this closure plan and Condition II.H.1. of this Permit.
43		

- 1 V.1.B.g. A written notification that closure has begun and will be conducted in accordance with
2 the Plan, including these conditions to the Plan, shall be submitted to the Department
3 within 30 days after the Plan is approved through issuance of this Permit.
4
- 5 V.1.B.h. Concrete sampling and analysis activities (basin and background sampling) shall be
6 conducted as described within the Plan and as augmented by the Decommissioning
7 Work Plan (DWP) entitled "Concrete Sampling - 183-H Solar Evaporation Basins"
8 (DWP-H-080-00001) as found in Attachment 12 of this Permit.
9
- 10 V.1.B.i. Soil sampling and analyses activities (including Phases I and II, berm and background
11 sampling) shall be conducted as described within the Plan and as augmented by DWP-
12 H-080-00005 entitled "Core Drill Sampling - 183-H Solar Evaporation Basins (Phase
13 I)"; WHC-SD-EN-AP-056 entitled "183-H Solar Evaporation Basins Vadose Zone
14 Sampling Plan"; and DWP-H-026-00008 entitled "Berm Removal For 183-H Solar
15 Evaporation Basins" as found in Attachments 13, 14, and 15, respectively, of this
16 Permit.
17
- 18 V.1.B.j. The results of Basin concrete sampling (including background sampling) shall be
19 received by the Department within 180 days of the effective date of this Permit. This
20 submittal shall include the raw analytical data, a summary of analytical results, a data
21 validation package, and a narrative summary with conclusions.
22
- 23 V.1.B.k. The results of Basin soil sampling (including Phases I and II, berm and background
24 sampling) shall be received by the Department within 180 days of the effective date of
25 this Permit. This submittal shall include the raw analytical data, a summary of
26 analytical results, a data validation package, and a narrative summary with
27 conclusions.
28
- 29 V.1.B.l. The Department shall be provided, for review and approval, a sampling plan and the
30 date of sampling for any sampling event not addressed above which provides data used
31 to support Basin closure activities at least 30 days prior to initiating actual sampling
32 activities. This condition applies to, but is not limited to, equipment and non-concrete
33 structural sampling and verification sampling. The results of this sampling shall be
34 submitted to the Department. These submittals shall include the raw analytical data, a
35 summary of analytical results, a data validation package, and a narrative summary
36 with conclusions.
37
- 38 V.1.B.m. The Permittees shall submit to the Department, for approval, a notification indicating
39 which closure option identified in Condition II.K. of this Permit will be utilized for the
40 Basins. This notification shall be submitted at least 60 days prior to implementation
41 of the option and shall be accompanied by the technical and regulatory justification for
42 choosing the closure option along with any supporting documentation including, if
43 necessary, the result of sampling per Conditions V.1.B.h. through V.1.B.l. This
44 notification shall also be accompanied by a revised Figure I.B-20 of the Plan

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- 1 indicating a new closure schedule; however, the date of final closure shall not exceed
2 eighteen (18) months after the effective date of this Permit. Implementation of the
3 option cannot commence until receipt of the Department's written approval for the
4 closure option.
5
- 6 V.1.B.n. Regardless of the option chosen from Condition II.K., the Permittees and the
7 independent, registered, professional engineer certifications of closure shall be
8 prepared and submitted to the Department within 60 days of closure as described in
9 Section I.C-1. of the closure plan.
10
- 11 V.1.B.o. If a landfill closure is chosen, the definitive design documents, construction
12 specifications, construction drawings, and construction quality assurance plans for any
13 engineered system (including a final cover system) shall be submitted to the
14 Department pursuant to Condition I.C.3.
15
- 16 V.1.B.p. After review of the documents identified in Condition V.1.B.o., the Department may
17 issue a unit-specific Construction Inspection Plan (CIP). If the Department chooses to
18 issue a CIP, the Department shall be provided with all submittals and notifications
19 required by the CIP and within the time period identified in the CIP.
20
- 21 V.1.B.q. If a landfill closure is chosen, notification of any of the following occurrences shall be
22 provided to the Department within 30 days of observance until a postclosure permit is
23 issued: settlement/sedimentation in the final cover greater than one (1) foot; actual
24 vegetative cover canopy on the final cover less than 50 percent (50%) of a typical
25 Hanford cover canopy six (6) months after closure; erosion of the final cover greater
26 than six (6) inches; tampering or damage to wells or well heads. The notification must
27 include the extent and cause of the occurrence as well as actions taken (or to be taken)
28 to mitigate the occurrence.
29
- 30 V.1.B.r. If a modified closure is chosen, the Permittees shall request any reduction of landfill
31 requirements identified in the Plan pursuant to Condition I.C.3. This request shall be
32 based upon the quantity and concentration of contamination which will remain in
33 place, and shall meet the requirements of Condition II.K.3.
34
- 35 V.1.B.s. If a modified closure or landfill closure is chosen, a survey plat shall be prepared and
36 submitted to the Department, and the Benton County Planning Department no later
37 than 60 days after certification of closure as described in Section I.C-2. of the Plan.
38
- 39 V.1.B.t. If a modified closure or a landfill closure is chosen, a notice on the deed to the
40 property shall be prepared and submitted to the Auditor of Benton County no later
41 than 60 days after certification of closure as described in Section I.C-3. of the Plan.
42 No later than 30 days after submitting this notice, a certification signed by the
43 Permittees must be submitted to the Department that the notification has been recorded
44 along with a copy of the notice itself.

- 1 V.1.B.u. If a modified closure or landfill closure is chosen, a revision to the "Final Status
2 Postclosure Permit Application, 183-H Solar Evaporation Basins" (June 1988), shall
3 be submitted pursuant to Condition I.C.3. within 12 months of the Department's
4 approval of the closure option.
5
- 6 V.1.B.v. Quarterly and annual ground water monitoring reports for the wells specified in the
7 Plan shall continue to be submitted to the Department until clean closure is
8 acknowledged by the Department in writing or as specified otherwise in a Basin
9 postclosure permit.

CHAPTER 2

300 Area Solvent Evaporator (Clean Closed)

The 300 Area Solvent Evaporator (300 ASE) is an inactive treatment unit which is currently undergoing permanent closure activities. This TSD unit was operated as an evaporation treatment unit for dangerous wastes. This Chapter sets forth the closure requirements for this TSD unit.

V.2.A. COMPLIANCE WITH THE APPROVED CLOSURE PLAN

The Permittees shall comply with all the requirements set forth in the 300 Area Solvent Evaporator Closure Plan (Plan), as found in Attachment 16, including the amendments specified in Condition V.2.B. Enforceable portions of the Plan are listed below (All subsections, figures, and tables included in these portions are also enforceable unless stated otherwise):

Part A Application

Section 1.1.1	Location and General Description
Section 1.1.2	The 300-Area Solvent Evaporator
Section 1.2	Security Information
Chapter 2.0	Closure Performance Activities
Chapter 3.0	Description of Closure Activities
Chapter 4.0	Certification of Closure
Chapter 5.0	Post-closure
Chapter 6.0	Procedures to Prevent Hazards
Chapter 7.0	Contingency Plan
Chapter 8.0	Personnel Training
Section 9.8	Other Requirements

Appendix E Soil and Concrete Sampling and Analysis Plan for the 300
Area Solvent Evaporator

V.2.B. AMENDMENTS TO THE APPROVED CLOSURE PLAN

V.2.B.a. A written notification that closure has begun and will be conducted in accordance with the Plan, including these Conditions to the Plan, shall be submitted to the Department within 30 days after the Plan is approved through issuance of this Permit.

V.2.B.b. The results of all sampling required by this Plan shall be provided to the Department. This submittal shall include the raw analytical data, a summary of analytical results, a data validation package, and a narrative summary with conclusions.

V.2.B.c. The Department shall be provided, for review and approval, a sampling plan and the date of sampling for any sampling event not addressed in the Plan which provides data used to support 300 ASE closure activities at least 30 days prior to initiating actual sampling activities. The results of this sampling shall be submitted to the Department. These submittals shall include the raw analytical data, a summary of analytical results, a data validation package, and a narrative summary with conclusions.

V.2.B.d. Annual cost estimates shall be provided to the Department as described in Section 5.2. of this closure plan and Condition II.H.1. of this Permit. At Page 5-2, line 6, delete "October 1993", and replace it with "the first October after the effective date of this Permit."

V.2.B.e. The Permittees shall notify the Department, in writing, if the initial action levels in Table 3-2 of the Plan are exceeded. The notification shall either include a request for the Department's approval of alternative action levels or identify the interim measures to be taken at the 300 ASE until closure activities are performed in conjunction with the 300-FF-2 Operable Unit.

V.2.B.f. The Permittees and the independent, registered, professional engineer certifications of closure shall be prepared and submitted to the Department by registered mail within 60 days of closure as described in Section 4.0. of the Plan. The Permittees shall continue to address the 300 ASE as a dangerous waste management unit until receipt of the Department's written notification that the 300 ASE is accepted as clean closed.

V.2.B.g. The Permittees shall complete 300 ASE closure activities within 180 days after the effective date of this Permit.

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CHAPTER 3

2727-S Nonradioactive Dangerous Waste Storage Facility (Clean Closed)

The 2727-S Nonradioactive Dangerous Waste Storage Facility (2727-S) is an inactive storage unit which is currently undergoing permanent closure activities. This TSD unit was operated as a storage unit for dangerous wastes. This Chapter sets forth the closure requirements for this TSD unit.

V.3.A. COMPLIANCE WITH THE APPROVED CLOSURE PLAN

The Permittees shall comply with all the requirements set forth in the 2727-S Nonradioactive Dangerous Waste Storage Facility Closure Plan (Plan), as found in Attachment 17, including the amendments specified in Condition V.3.B. Enforceable portions of the Plan are listed below (All subsections, figures, and tables included in these portions are also enforceable unless stated otherwise):

Part A Application

Section 1.1	Location Information
Section 1.2	Security
Section 1.3	Facility Description and Operations
Chapter 2.0	Closure Performance Standard
Chapter 4.0	Closure Activities
Chapter 5.0	Contingency Plan
Chapter 6.0	Training Requirements
Chapter 7.0	Closure Plan Schedule
Appendix F	Sampling and Handling Procedures
Appendix G	Quality Assurance Project Plan
Appendix H	Personnel Training
Appendix I	Certification Statements

1 V.3.B. AMENDMENTS TO THE APPROVED CLOSURE PLAN

2
3 V.3.B.a. A written notification that closure has begun and will be conducted in accordance with
4 the Plan, including these Conditions to the Plan, shall be submitted to the Department
5 within 30 days after the Plan is approved through issuance of this Permit.
6

7 V.3.B.b. The results of all sampling required by this Plan shall be provided to the Department.
8 This submittal shall include the raw analytical data, a summary of analytical results, a
9 data validation package, and a narrative summary with conclusions.
10

11 V.3.B.c. The Department shall be provided, for review and approval, a sampling plan and the
12 date of sampling for any sampling event not addressed in the Plan which provides data
13 used to support 2727-S closure activities at least 30 days prior to initiating actual
14 sampling activities. The results of this sampling shall be submitted to the Department.
15 These submittals shall include the raw analytical data, a summary of analytical
16 results, a data validation package, and a narrative summary with conclusions.
17

18 V.3.B.d. Annual cost estimates shall be provided to the Department as described in Section 4.6.
19 of this closure plan and Condition II.H.1. of this Permit.
20

21 V.3.B.e. The Permittees shall notify the Department, in writing, if clean closure concentrations
22 cannot be achieved. The notification shall include a justification for not completing
23 clean closure requirements and a plan to address dangerous waste postclosure
24 requirements at 2727-S.
25

26 V.3.B.f. The Permittees and the independent, registered, professional engineer certifications of
27 closure shall be prepared and submitted to the Department by registered mail within 60
28 days of closure as described in Section 4.7 of the Plan. The Permittees shall continue
29 to address 2727-S as a dangerous waste management unit until receipt of the
30 Department's written notification that 2727-S is accepted as clean closed.
31

32 V.3.B.g. The Permittees shall complete 2727-S closure activities within 180 days after the
33 effective date of this Permit.
34

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CHAPTER 4

**Simulated High Level Waste Slurry Treatment and Storage Unit
(Clean Closed)**

The Simulated High Level Waste Slurry Treatment and Storage Unit (SHLWS) is an inactive storage and treatment unit which is currently undergoing permanent closure activities. This TSD unit was operated as a storage and treatment unit for simulated slurry as a test operation in connection with the grout project. This Chapter sets forth the closure requirements for this TSD unit.

V.4.A. COMPLIANCE WITH APPROVED CLOSURE PLAN

The Permittees shall comply with all the requirements set forth in the *SHLWS Closure Plan* (Plan), as found in Attachment 19, including the amendments specified in Condition V.4.B. Enforceable portions of the Plan are listed below (all subsections, figures, and tables included in these portions are also enforceable unless stated otherwise):

Section 1.2	Part A Permit Application
Section 2.3	Description of the SHLWS T/S Unit/Physiography
Section 2.4	Location Information
Section 3.1	Characteristics of Untreated Waste
Section 3.2	Characteristics of Treated Waste
Section 6.1	General Closure Requirements
Section 6.2	General Post-Closure Requirements
Section 6.3	Closure of Chemical, Physical, and Biological Treatment Units
Appendix A	Sampling and Analysis Plan
Appendix B	Quality Assurance Project Plan

V.4.B. AMENDMENTS TO THE APPROVED CLOSURE PLAN.

V.4.B.a. A written notification stating closure has been and will continue to be conducted in accordance with the Plan, including the conditions of the Plan, shall be submitted to the Department within 30 days after the effective date of Revision 1 to this Permit.

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- 1 V.4.B.b. The Permittees shall notify the Department, in writing, if at any time it is determined
2 the clean closure levels specified in this plan are exceeded.
3
- 4 V.4.B.c. The Permittees and the independent, registered, professional engineer certification of
5 closure shall be prepared and submitted to the Department by registered mail within 60
6 days of closure as described in the Plan. The Permittees shall continue to address the
7 unit as a dangerous waste management unit until receipt of the Department's written
8 notification stating the unit is accepted as clean closed.
9
- 10 V.4.B.d. The Permittees shall complete SHLWS closure activities 180 days after the effective
11 date of Revision 1 to this Permit.
12
- 13 V.4.B.e. Any remaining solid waste at the unit, generated during soil sampling and
14 decontamination activities, shall be designated according to the analytical results of
15 these activities and managed accordingly. The Department shall be informed in
16 writing of the final disposition of the waste.
17

CHAPTER 5

218-E-8 Borrow Pit Demolition Site

The 218-E-8 Borrow Pit Demolition Site (218 BPDS) is an inactive treatment unit which is currently undergoing permanent closure activities. This TSD unit was operated as an open burning/open detonation unit for dangerous wastes. This Chapter sets forth the closure requirements for this TSD unit.

V.5.A. COMPLIANCE WITH APPROVED CLOSURE PLAN

The permittees shall comply with all the requirements set forth in the *218-E-8 Borrow Pit Demolition Site Closure Plan* (Plan), as found in Attachment 20, including the amendments specified in condition V.5.B. Enforceable portions of the Plan are listed below (all subsections, figures, and tables included in these portions are also enforceable unless stated otherwise):

Part A Application

Section 2.2.2	Facility Description and General Provisions
Section 2.2.3	Description of 218-E-8 Borrow Pit Demolition Site
Section 2.4	Security Information
Chapter 3.0	Process Information
Chapter 4.0	Waste Characteristics
Chapter 5.0	Groundwater Monitoring
Chapter 6.0	Closure Strategy and Performance Standards
Chapter 7.0	Closure Activities
Chapter 8.0	Postclosure Plan
Appendix 4A	Toxicity Data
Appendix 7A	Quality Assurance Project Plan for Soil Sampling and Analysis for the 218-E-8 Borrow Pit Demolition Site

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- 1 Appendix 7B Training Course Descriptions
2
3 Appendix 7C Sampling and Analysis Plan
4
5 V.5.B. AMENDMENTS TO THE APPROVED CLOSURE PLAN
6
7 V.5.B.a. A written notification stating closure has begun and will be conducted in accordance
8 with the Plan, including these additional conditions to the Plan, shall be submitted to
9 the Department within 30 days after the effective date of Revision 1 to this Permit.
10
11 V.5.B.b. The results of all sampling required by this Plan shall be provided to the Department.
12 This submittal shall include the raw analytical data, a summary of analytical results, a
13 data validation package, and a narrative summary with conclusions.
14
15 V.5.B.c. The Department shall be provided, for review and approval, a sampling plan and the
16 date of sampling for any sampling event not addressed in the Plan which provides data
17 used to support 218 BPDS closure activities at least 30 days prior to initiating actual
18 sampling activities. The results of this sampling shall be submitted to the Department.
19 These submittals shall include the raw analytical data, a summary of analytical results,
20 a data validation package, and a narrative summary with conclusions.
21
22 V.5.B.d. The Permittees shall notify the Department, in writing, if the action levels as defined in
23 Section 6.1 of the Plan are exceeded. The notification shall either include a request to
24 develop a phase two investigation to determine further sampling activities or remedial
25 actions, or identify the interim measures to be taken at the 218 BPDS until closure
26 activities are performed in conjunction with the 200-PO-6 Operable Unit.
27
28 V.5.B.e. The Permittees and the independent, registered, professional engineer certification of
29 closure shall be prepared and submitted to the Department by registered mail within 60
30 days of closure, as described in Section 6.3.2 of the Plan. The Permittees shall
31 continue to address the 218 BPDS as a dangerous waste management unit until receipt
32 of the Department's written notification stating the 218 BPDS is accepted as clean
33 closed.
34
35 V.5.B.f. The Permittees shall complete 218 BPDS closure activities within 180 days after the
36 effective date of Revision 1 to this Permit.

CHAPTER 6

200 West Area Ash Pit Demolition Site

The 200 West Area Ash Pit Demolition Site (200 APDS) is an inactive treatment unit which is currently undergoing permanent closure activities. This TSD unit was operated as an open burning/open detonation unit for dangerous wastes. This Chapter sets forth the closure requirements for this TSD unit.

V.6.A. COMPLIANCE WITH APPROVED CLOSURE PLAN

The permittees shall comply with all the requirements set forth in the *200 West Area Ash Pit Demolition Site Closure Plan* (Plan), as found in Attachment 21, including the amendments specified in condition V.5.B. Enforceable portions of the Plan are listed below (all subsections, figures, and tables included in these portions are also enforceable unless stated otherwise):

Part A Application

Section 2.2.2	Facility Description and General Provisions
Section 2.2.3	Description of 200 West Area Ash Pit Demolition Site
Section 2.4	Security Information
Chapter 3.0	Process Information
Chapter 4.0	Waste Characteristics
Chapter 5.0	Groundwater Monitoring
Chapter 6.0	Closure Strategy and Performance Standards
Chapter 7.0	Closure Activities
Chapter 8.0	Postclosure Plan
Appendix 4A	Toxicity Data
Appendix 7A	Quality Assurance Project Plan for Soil Sampling and Analysis for the 200 West Area Ash Pit Demolition Site

Appendix 7B Training Course Descriptions

Appendix 7C Sampling and Analysis Plan

V.6.B. AMENDMENTS TO THE APPROVED CLOSURE PLAN

V.6.B.a. A written notification stating closure has begun and will be conducted in accordance with the Plan, including these additional conditions to the Plan, shall be submitted to the Department within 30 days after the effective date of Revision 1 to this Permit.

V.6.B.b. The results of all sampling required by this Plan shall be provided to the Department. This submittal shall include the raw analytical data, a summary of analytical results, a data validation package, and a narrative summary with conclusions.

V.6.B.c. The Department shall be provided, for review and approval, a sampling plan and the date of sampling for any sampling event not addressed in the Plan which provides data used to support 200 APDS closure activities at least 30 days prior to initiating actual sampling activities. The results of this sampling shall be submitted to the Department. These submittals shall include the raw analytical data, a summary of analytical results, a data validation package, and a narrative summary with conclusions.

V.6.B.d. The Permittees shall notify the Department, in writing, if the action levels as defined in Section 6.1 of the Plan are exceeded. The notification shall either include a request to develop a phase two investigation to determine further sampling activities, or remedial actions or identify the interim measures to be taken at the 200 APDS until closure activities are performed in conjunction with the 200-SS-2 Operable Unit.

V.6.B.e. The Permittees and the independent, registered, professional engineer certification of closure shall be prepared and submitted to the Department by registered mail within 60 days of closure, as described in Section 6.3.2 of the Plan. The Permittees shall continue to address the 200 APDS as a dangerous waste management unit until receipt of the Department's written notification stating the 200 APDS is accepted as clean closed.

V.6.B.f. The Permittees shall complete 200 APDS closure activities within 180 days after the effective date of Revision 1 to this Permit.

CHAPTER 7

2101-M Pond

The 2101-M Pond is undergoing permanent closure activities. This unit was operated as a disposal unit for potentially dangerous waste. This chapter sets for the closure requirements for this TSD unit.

V.7.A. COMPLIANCE WITH APPROVED CLOSURE PLAN

The Permittees shall comply with all requirements set forth in the *2101-M Pond Closure Plan* (Plan), found in Attachment 22, including the amendments specified in Condition V.7.B. Enforceable portions of the Plan are listed below (all subsections, figures, and tables included in these portions are also enforceable):

Appendix A-1	Part A Permit Application, Form 3
Section I-3	2101-M Pond Location and General Description
Section I-5	Security
Chapter A	Closure Performance Standards
Chapter B	Content of Closure Plan
Chapter C	Certification of Closure

V.7.B. AMENDMENTS TO THE APPROVED CLOSURE PLAN

- V.7.B.a. A written notification stating closure has been and will continue to be conducted in accordance with the Plan, including these conditions of the Plan, shall be submitted to the Department within 30 days after the effective date of Revision 1 to this Permit.
- V.7.B.b. The Permittees shall notify the Department, in writing, if at any time it is determined the clean closure levels specified in this plan are exceeded.
- V.7.B.c. The Permittees and the independent, registered, professional engineer certification of closure shall be prepared and submitted to the Department by registered mail within 60 days of closure, as described in the Plan. The Permittees shall continue to address the unit as a dangerous waste management unit until receipt of the Departments written notification stating the unit is accepted as clean closed.

CHAPTER 8

216-B-3 Expansion Ponds (Clean Closed)

The 216-B-3 Expansion Ponds is undergoing permanent closure activities. This unit was operated as a treatment and disposal unit for dangerous waste. This chapter sets forth the closure requirements for this TSD unit.

V.8.A. COMPLIANCE WITH APPROVED CLOSURE PLAN

The Permittees shall comply with all requirements set forth in the *216-B-3 Expansion Ponds Closure Plan* (Plan), found in Attachment 23, including the amendments specified in Condition V.8.B. Enforceable portions of the Plan are listed below (all subsection, figures, and tables included in these portions are also enforceable):

Part A Permit Application

Section 1.2	Closure Strategy
Chapter 2.0	Facility Description and Location Information
Chapter 5.0	Groundwater Monitoring
Chapter 6.0	Closure Performance Standards
Chapter 7.0	Closure Activities
Chapter 8.0	Postclosure Plan

V.8.B. AMENDMENTS TO THE APPROVED CLOSURE PLAN

V.8.B.a. A written notification stating closure has been and will continue to be conducted in accordance with the Plan, including these condition of the Plan, shall be submitted to the Department within 30 days after the effective date of Revision 1 to this Permit.

V.8.B.b. Groundwater monitoring will continue in accordance with B Pond System groundwater monitoring program. Quarterly and annual groundwater monitoring reports for the wells specified in the Plan shall continue to be submitted to the Department until closure of the 216-B-3 Main Pond is acknowledged by the Department in writing, or as specified otherwise in a postclosure permit.

- 1 V.8.B.c. The Permittees shall notify the Department, in writing, if at any time it is determined
2 the clean closure levels specified in this plan are exceeded.
3
- 4 V.8.B.d. The Permittees and the independent, registered, professional engineer certification of
5 closure shall be prepared and submitted to the Department by registered mail with 60
6 days of closure as described in the Plan. The Permittees shall continue to address the
7 unit as a dangerous waste management unit until receipt of the Department's written
8 notification stating the unit is accepted as clean closed.
9
- 10 V.8.B.e. The Permittees shall complete 216-B-3 expansion lobes closure activities within 180
11 days after the effective date of Revision 1 to this Permit.

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CHAPTER 9

Hanford Patrol Academy Demolition Site

The Hanford Patrol Academy Demolition Site (HPADS) is an inactive treatment unit which is currently undergoing permanent closure activities. This TSD unit was operated as an open burning/open detonation unit for dangerous waste. This Chapter sets forth the closure requirements for this TSD unit.

V.9.A. COMPLIANCE WITH THE APPROVED CLOSURE PLAN

The permittees shall comply with all the requirements set forth in the Hanford Patrol Academy Demolition Sites Closure Plan (Plan), as found in Attachment 24, including the amendments specified in condition V.9.B. Enforceable portions of the Plan are listed below. (All subsections, figures, and tables included in these portions are also enforceable unless stated otherwise.)

Part A Application

Section 2.2.2	Facility Description and General Provisions
Section 2.2.3	Description of Hanford Patrol Academy Demolition Sites
Section 2.2.4	Security Information
Chapter 3.0	Process Information
Chapter 4.0	Waste Characteristics
Chapter 5.0	Groundwater Monitoring
Chapter 6.0	Closure Strategy and Performance Standards
Chapter 7.0	Closure Activities
Chapter 8.0	Postclosure Plan
Appendix 4A	Waste Inventories
Appendix 7A	Quality Assurance Project Plan for Soil Sampling and Analysis for the Hanford Patrol academy Demolition Sites

Appendix 7B Training Course Descriptions

Appendix 7C Sampling and Analysis Plan

V.9.B. AMENDMENTS TO THE APPROVED CLOSURE PLAN

V.9.B.a. If closure activities have not begun and/or will not be conducted in accordance with the Plan, including these unit specific Conditions to the Plan, a written notification shall be submitted to the Department within 30 days after the Plan is approved.

V.9.B.b. The results of all sampling required by this Plan shall be provided to the Department. This submittal shall include the raw analytical data, a summary of analytical results, a data validation package, and a narrative summary with conclusions.

V.9.B.c. The Department shall be provided, for review and approval, a sampling plan and the date of sampling for any sampling event not addressed in the Plan which provides data used to support HPADS closure activities at least 30 days prior to initiating actual sampling activities. The results of this sampling shall be submitted to the Department. These submittals shall include the raw analytical data, a summary of analytical results, a data validation package, and a narrative summary with conclusions.

V.9.B.d. The Permittees shall notify the Department, in writing, if the action levels as defined in Section 6.1 of the Plan are exceeded. The notification shall include a request to develop a phase two investigation to determine further sampling activities or remedial actions.

V.9.B.e. The Permittees and the independent, registered, professional engineer certifications of closure shall be prepared and submitted to the Department by registered mail within 60 days of closure, as described in Section 6.3.2 of the Plan. The Permittees shall continue to address HPADS as a dangerous waste management unit until receipt of the Department's written notification that HPADS is accepted as clean closed.

V.9.B.f. The Permittees shall complete HPADS closure activities within 180 days after the effective date of Revision 2 to this Permit.

CHAPTER 10

105-DR Large Sodium Fire Facility

The Large Sodium Fire Facility (LSFF) was a research laboratory used to conduct experiments for studying the behavior of alkali metals. This facility was also used for the treatment of alkali metal dangerous wastes. This chapter sets forth the closure requirements for this TSD unit.

V.10.A. COMPLIANCE WITH THE APPROVED CLOSURE PLAN

The Permittees shall comply with all the requirements set forth in the Large Sodium Fire Facility Closure Plan (Plan), as found in Attachment 25, including the amendments specified in Condition V.10.B. Enforceable portions of the Plan are listed below. (All subsections, figures, and tables included in these portions are also enforceable unless stated otherwise.)

Part A Application

Section 2.2	Unit Description and Operations
Section 2.3	Security Information
Chapter 4	Waste Characteristics
Chapter 6	Closure Strategy and Performance Standards
Chapter 7	Closure Activities
Chapter 8	Postclosure
Appendix B	Sampling Locations
Appendix E	Quality Assurance Project Plan for Characterization and Verification Sampling at the Large Sodium Fire Facility

V.10.B. AMENDMENTS TO THE APPROVED CLOSURE PLAN

V.10.B.a. If closure activities have not begun and/or will not be conducted in accordance with the Plan, including these unit specific Conditions to the Plan, a written notification shall be submitted to the Department within 30 days after the Plan is approved.

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- 1 V.10.B.b. The results of all sampling required by this Plan shall be provided to the Department.
2 This submittal shall include the raw analytical data, a summary of analytical results, a
3 data validation package, and a narrative summary of conclusions.
4
- 5 V.10.B.c. The Department shall be provided, for review and approval, a sampling plan and the
6 date of sampling for any sampling event not addressed in the Plan which provides data
7 used to support LSFF cleanup activities at least 30 days prior to initiating actual
8 sampling activities. The results of this sampling shall be submitted to the Department.
9 These submittals shall include the raw analytical data, a summary of analytical results,
10 a data validation package, and a narrative summary of conclusions.
11
- 12 V.10.B.d. The Permittees shall notify the Department, in writing, if the action levels cited in
13 Section 6.1.1 of the Plan cannot be achieved. The notification shall include either a
14 request for the Department's approval of alternative action levels or identify the
15 interim measures to be taken in the LSFF until closure activities are performed in
16 conjunction with the 100-DR-2 Operable Unit.
17
- 18 V.10.B.e. The Permittees and the independent, registered, professional engineer certifications of
19 closure shall be prepared and submitted to the Department by registered mail within 60
20 days of closure, as described in Section 7.9 of the Plan. The Permittees shall continue
21 to address LSFF as a dangerous waste management unit until receipt of the
22 Department's written notification that LSFF is accepted as closed.
23
- 24 V.10.B.f. The Permittees shall complete LSFF closure activities within 240 days after the
25 effective date of Revision 2 of this Permit.

CHAPTER 11

304 Concretion Facility

The 304 Concretion Facility (304 Facility) was used for the treatment of dangerous wastes produced during the fuel fabrication process. These wastes consist of beryllium/Zircaloy-2 chips and Zircaloy-2 chips and fines.

V.11.A. COMPLIANCE WITH THE APPROVED CLOSURE PLAN

The Permittees shall comply with all the requirements set forth in the 304 Concretion Facility Closure Plan (Plan), as found in Attachment 26, including the amendments specified in Condition V.2.B. Enforceable portions of the Plan are listed below. (All subsections, figures, and tables included in these portions are also enforceable unless stated otherwise.)

Part A Application

Section 2.1	Description of the 304 Concretion Facility
Section 2.3	Security
Chapter 4	Waste Characteristics
Chapter 6	Closure Strategy and Performance Standards
Chapter 7	Closure Activities
Chapter 8	Postclosure
Appendix B	Random Sampling Locations
Appendix E	Personnel Training
Appendix F	Quality Assurance Project Plan for Sampling and Analysis for the 304 Concretion Facility Closure Activities
Appendix G	Phase I Sampling and Analysis Plan for the 304 Concretion Facility Closure Activities

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1 V.11.B. AMENDMENTS TO THE APPROVED CLOSURE PLAN

2
3 V.11.B.a. If closure activities have not begun and/or will not be conducted in accordance with
4 the Plan, including these unit specific Conditions to the Plan, a written notification
5 shall be submitted to the Department within 30 days after the Plan is approved.
6

7 V.11.B.b. The results of all sampling required by this Plan shall be provided to the Department.
8 This submittal shall include the raw analytical data, a summary of analytical results, a
9 data validation package, and a narrative summary of conclusions.
10

11 V.11.B.c. The Department shall be provided, for review and approval, a sampling plan and the
12 date of sampling for any sampling event not addressed in the Plan which provides data
13 used to support 304 Facility cleanup activities at least 30 days prior to initiating actual
14 sampling activities. The results of this sampling shall be submitted to the Department.
15 These submittals shall include the raw analytical data, a summary of analytical results,
16 a data validation package, and a narrative summary of conclusions.
17

18 V.11.B.d. Page 6-2, lines 12-13. Delete "Hanford Baseline Risk Assessment Methodology
19 (DOE-RL 1992)" and replace with "Model Toxics Control Act (WAC 173-340). The
20 Permittees shall notify the Department, in writing, if the action levels cited in Section
21 6.1 of the Plan are exceeded. The notification shall include a request for the
22 Department's approval of alternative action levels or identify the interim measures to
23 be taken in the 304 Facility until closure activities are performed in conjunction with
24 the 300-FF-2 Operable Unit.
25

26 V.11.B.e. The Permittees and the independent, registered, professional engineer certifications of
27 closure shall be prepared and submitted to the Department by registered mail within 60
28 days of closure as described in Section 7.8 of the Plan. The Permittees shall continue
29 to address the 304 Facility as a dangerous waste management unit until receipt of the
30 Department's written notification that the 304 Facility is accepted as clean closed.
31

32 V.11.B.f. The Permittees shall complete 304 Facility closure activities within 180 days after the
33 effective date of Revision 2 of this Permit.
34
35

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ATTACHMENT 2

The Permit Modification Schedule

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PERMIT MODIFICATION SCHEDULE**Attachment 27**

Year and Mod.	TSD/Unit	*	Status and Remarks
1994 Mod. O	616 Storage Facility	B	In Rev. 0, Completed, approved
	305-B Storage Facility	B	In Rev. 0, Completed, approved
	183-H Solar Evaporation Basin	C	In Rev. 0, Completed approved
	300 Area Solvent Evaporator	CC	In Rev. 0, Completed, approved
	2727-S Storage Facility	CC	In Rev. 0, Completed, approved
1995 Mod. A	218-E-8 Borrow Pit Demolition Site	C	In Rev. 1, Completed, approved
	200 Area Ash Pit Demolition Site	C	In Rev. 1, Completed, approved
	216-B-3 Expansion Ponds	CC	In Rev. 1, Completed, approved
	2101 M Pond	C	In Rev. 1, Completed, approved
	Simulated High Level Waste Slurry Treatment & Storage	CC	In Rev. 1, Completed, approved
1995 Mod. A'	Hanford Patrol Academy Demolition	C	In Rev. 2, Completed, approved
	105-DR Large Sodium Fire Facility	C	In Rev. 2, Completed, approved
	304 Concretion Facility	C	In Rev. 2, Completed, approved
1996 Mod. B	PUREX Tunnels 1 & 2	B	
	300 Area Process Trenches [∇]	C	
	3718-F Alkali Metal Treatment	C	
	4843 Alkali Metal Storage	C	
1997 Mod. C	303-K Storage Facility	C	
	300 Waste Acid Treatment & Storage	C	
	325 Hazardous Waste Treatment Unit	B	
	200 Area Liquid Waste Complex	B	
	216-U-12 Crib	C	
	Low Level Burial Grounds	B	
1998 Mod. D	100 D Ponds	C	
	1324-N Surface Impoundment	C	
	1324-NA Percolation Pond	C	
	Hanford Central Waste Complex	B	
	Waste Receiving & Processing (1)	B	
1999 Mod. E	222-S Laboratories	B	
	Double Shell Tank System	B	
	1325-N Liquid Waste Disposal	C	
	1301-N Liquid Waste Disposal	C	
	Transuranic Storage and Assay Facility	B	
2000 Mod. F.	216-B-3 Main Pond	C	
	216-B-63 Trench	C	
	216-A-29 Ditch	C	

Legend: * - Type of Permit C - Closure/PostClosure Plan
 B - Part B Application CC - Clean Closed

Note:

1. All TSD Units not shown in this table will be scheduled through a Class ¹ 1 Permit Modification (requiring prior approval) to Attachment 27.
2. All Permit Modifications listed in this table will be conducted in accordance with the applicable requirements in WAC 173-303-830.
3. New TSD Part B Applications, if submitted, will be added to this table through a Class ¹ 1 Permit Modification (requiring prior approval).

[∇] Closure plan/Postclosure plan to go through public comment in conjunction with 300-FF-1 O.U.

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ATTACHMENT 3

Permit Applicability Matrix

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HANFORD FACILITY WIDE PERMIT (REV. 2)

ATTACHMENT 3

PERMIT APPLICABILITY MATRIX

Updated August 28, 1995

CONDITION		CATEGORY						QUALIFIERS
PART	TITLE	A	B ¹	C ²	D ³	E	F	
PART I								
I.A.	EFFECT OF PERMIT							
I.A.1.a.		*	*	*	*	*	*	
I.A.1.b.		*	*	*	*	*	*	
I.A.2.		*	*		*	*	*	
I.A.3.	Coord. w/ FFACO		*		*	*	*	
I.B.	PERSONAL & PROPERTY RIGHTS		*		*	*	*	
I.C.	PERMIT ACTIONS							
I.C.1.	Modification, Revocation, Reissuance, or Termination		*		*	*	*	
I.C.2.	Filing of a Request		*		*	*	*	
I.C.3.	Modifications		*		*	*	*	
I.D.	SEVERABILITY							
I.D.1.	Effect of Invalidation		*		*	*	*	
I.D.2.	Final Resolution		*		*	*	*	
I.E.	DUTIES & REQUIREMENTS							
I.E.1.	Duty to Comply		*		*	*	*	
I.E.2.	Compliance Not Constituting Defense		*		*	*	*	
I.E.3.	Duty to Reapply		*		*	*	*	
I.E.4.	Permit Expiration & Continuation		*		*	*	*	
I.E.5.	Need to Halt or Reduce Activity Not a Defense		*		*	*	*	
I.E.6.	Duty to Mitigate		*		*	*	*	
I.E.7.	Proper Operation & Maintenance		*			*	*	

CATEGORIES ARE DEFINED AS FOLLOWS:

A. Leased Land

B. North Slope and ALE

C. Interim Status TSD Units

D. Areas Between TSDs (excluding A and B)

E. TSD Unit Closures (in Part V)

F. TSD Operating Units (In Part III)

* Condition applies to this category, as modified by applicable footnotes and qualifiers

1 - For Category B, Part I Conditions only apply if future TSD activities are begun on the North Slope or ALE.

2 - For Category C, all Part I Condition apply to activities subject to Conditions II.U. and II.V.

3 - For Category D, Part I Conditions only apply to activities subject to Conditions II.A., II.C., II.D.4., II.G., II.I., II.L.3., II.O., II.Q., II.S., II.T., and II.X.

HANFORD FACILITY WIDE PERMIT (REV. 2)
ATTACHMENT 4
PERMIT APPLICABILITY MATRIX
Updated August 28, 1995

CONDITION		CATEGORY						QUALIFIERS
PART	TITLE	A	B ¹	C ²	D ³	E	F	
I.E.8.	Duty to Provide Information		*		*	*	*	
I.E.9.	Inspection & Entry		*		*	*	*	
I.E.10.	Monitoring & Records		*		*	*	*	
I.E.10.a.			*		*	*	*	
I.E.10.b.			*		*	*	*	
I.E.10.c.			*		*	*	*	
I.E.10.d.			*		*	*	*	
I.E.10.e.			*		*	*	*	
I.E.11.	Reporting Planned Changes		*			*	*	
I.E.12.	Certification of Construction or Modification		*				*	
I.E.13.	Anticipated Non-Compliance		*		*	*	*	
I.E.14.	Transfer of Permits		*			*	*	
I.E.15.	Immediate Reporting							
I.E.15.a.			*		*	*	*	
I.E.15.b.			*		*	*	*	
I.E.15.c.			*		*	*	*	
I.E.15.d.			*		*	*	*	
I.E.15.e.			*		*	*	*	
I.E.16.	Written Reporting		*		*	*	*	
I.E.17.	Manifest Discrepancy Report							
I.E.17.a.			*			*	*	
I.E.17.b.			*		*	*	*	
I.E.18.	Unmanifested Waste Report		*			*	*	
I.E.19.	Other Non-Compliance		*		*	*	*	
I.E.20.	Other Information		*		*	*	*	
I.E.21.								

CATEGORIES ARE DEFINED AS FOLLOWS:

A. Leased Land

B. North Slope and ALE

C. Interim Status TSD Units

D. Areas Between TSDs (excluding A and B)

E. TSD Unit Closures (in Part V)

F. TSD Operating Units (In Part III)

* Condition applies to this category, as modified by applicable footnotes and qualifiers

9513381.2633

HANFORD FACILITY WIDE PERMIT (REV. 2)

ATTACHMENT 4

PERMIT APPLICABILITY MATRIX

Updated August 28, 1995

CONDITION		CATEGORY						QUALIFIERS
PART	TITLE	A	B ¹	C ²	D ³	E	F	
I.E.22.	Annual Report		*		*	*	*	
I.F.	SIGNATORY REQUIREMENT		*		*	*	*	
I.G.	CONFIDENTIAL INFORMATION		*		*	*	*	
I.H.	DOCUMENTS TO BE MAINTAINED AT FACILITY SITE		*		*	*	*	
CONDITION		CATEGORY						QUALIFIERS
PART	TITLE	A	B	C	D	E	F	
PART II								
II.A.	FACILITY CONTINGENCY PLAN							
II.A.1.					*	*	*	For Category D, II.A. Conditions only apply to releases of hazardous substances which threaten human health or the environment.
II.A.2.					*	*	*	
II.A.3.					*	*	*	
II.A.4.					*	*		
II.A.5.					*	*	*	
II.B.	PREPAREDNESS & PREVENTION							
II.B.1.						*	*	
II.B.2.						*	*	
II.B.3.						*	*	
II.B.4.						*	*	
II.C.	PERSONNEL TRAINING							
II.C.1.						*	*	
II.C.2.					*	*	*	
II.C.3.						*	*	
II.C.4.					*	*	*	For Category D, Condition II.C.4. will not apply to unrestricted (publicly accessible) areas.
II.D.	WASTE ANALYSIS							

CATEGORIES ARE DEFINED AS FOLLOWS:

A. Leased Land

B. North Slope and ALE

C. Interim Status TSD Units

D. Areas Between TSDs (excluding A and B)

E. TSD Unit Closures (in Part V)

F. TSD Operating Units (In Part III)

* Condition applies to this category, as modified by applicable footnotes and qualifiers

HANFORD FACILITY WIDE PERMIT (REV. 2)
ATTACHMENT 4
PERMIT APPLICABILITY MATRIX
Updated August 28, 1995

CONDITION		CATEGORY						QUALIFIERS
PART	TITLE	A	B	C	D	E	F	
II.D.1.						*	*	
II.D.2.						*	*	
II.D.3.						*	*	
II.D.4.					*			
II.E.	QA/QC							
II.E.1.						*	*	
II.E.2.						*	*	
II.E.3.						*	*	
II.E.4.						*	*	
II.E.5.						*	*	
II.F.	GW AND VADOSE ZONE MONITORING					*	*	
II.F.1.	Purgewater Management					*	*	
II.F.2.	Well Remediation & Abandonment							
II.F.2.a.						*	*	
II.F.2.b.						*	*	
II.F.2.c.						*	*	
II.F.2.d.						*	*	
II.F.3.	Well Construction					*	*	
II.G.	SITING CRITERIA				*		*	For Category D, Condition II.G. only applies if a new TSD unit is to be sited.
II.H.	RECORDKEEPING & REPORTING							
II.H.1.	Cost Estimate for Facility Closure					*	*	
II.H.2.	Cost Estimate for Postclosure Monitoring & Maintenance					*	*	
II.H.3.						*	*	
II.I.	FACILITY OPERATING RECORD							

CATEGORIES ARE DEFINED AS FOLLOWS:

- | | |
|-----------------------------|---|
| A. Leased Land | D. Areas Between TSDs (excluding A and B) |
| B. North Slope and ALE | E. TSD Unit Closures (in Part V) |
| C. Interim Status TSD Units | F. TSD Operating Units (In Part III) |

* Condition applies to this category, as modified by applicable footnotes and qualifiers

9513381.2634

HANFORD FACILITY WIDE PERMIT (REV. 2)

ATTACHMENT 4

PERMIT APPLICABILITY MATRIX

Updated August 28, 1995

CONDITION		CATEGORY						QUALIFIERS
PART	TITLE	A	B	C	D	E	F	
II.I.1.		*	*		*	*	*	For Category D, II.I Conditions only apply to activities subject to this Permit as defined by this matrix.
II.I.1.a.		*	*		*	*	*	
II.I.1.b.							*	
II.I.1.c.					*	*	*	
II.I.1.d.						*	*	For Category E, Condition applicability to be specified in Part V.
II.I.1.e.			*		*			
II.I.1.f.					*	*	*	
II.I.1.g.						*	*	
II.I.1.h.	Condition Reserved							
II.I.1.i.						*	*	Condition II.I. only applies to existing records and records prepared after the date of Permit issuance.
II.I.1.j.						*	*	
II.I.1.k.					*	*	*	
II.I.1.l.	Condition Reserved							
II.I.1.m.						*	*	
II.I.1.n.					*	*	*	
II.I.1.o.	Condition Reserved							
II.I.1.p.			*		*	*	*	
II.I.1.q.			*		*	*	*	
II.I.1.r.					*	*	*	
II.I.1.s.					*	*	*	
II.I.1.t.					*	*	*	
II.I.2.		*	*		*	*	*	
II.J.	FACILITY CLOSURE							
II.J.1.						*	*	
II.J.2.						*	*	
II.J.3.						*	*	

CATEGORIES ARE DEFINED AS FOLLOWS:

A. Leased Land

B. North Slope and ALE

C. Interim Status TSD Units

D. Areas Between TSDs (excluding A and B)

E. TSD Unit Closures (in Part V)

F. TSD Operating Units (In Part III)

* Condition applies to this category, as modified by applicable footnotes and qualifiers

HANFORD FACILITY WIDE PERMIT (REV. 2)

ATTACHMENT 4

PERMIT APPLICABILITY MATRIX

Updated August 28, 1995

CONDITION		CATEGORY						QUALIFIERS
PART	TITLE	A	B	C	D	E	F	
II.J.4.						*	*	
II.K.	SOIL/GW CLOSURE PERFORMANCE STANDARDS							
II.K.1.						*	*	
II.K.2.						*	*	
II.K.3.						*	*	
II.K.4.						*	*	
II.K.5.						*	*	
II.K.6.						*	*	
II.K.7.						*	*	
II.L.	DESIGN & OPERATION OF FACILITY							
II.L.1.	Proper Design and Construction					*	*	Condition II.L.2. only applies to Category E if it is a landfill closure.
II.L.2.	Design Changes, Nonconformance, & As-Built Drawings					*	*	
II.L.3.	Facility Compliance				*	*	*	
II.M.	SECURITY					*	*	
II.N.	RECEIPT OF DANGEROUS WASTES GENERATED OFF-SITE							
II.N.1.	Receipt of Off-Site Waste						*	
II.N.2.	Waste From Sources Outside the U.S.						*	
II.N.3.	Notice to Generator						*	
II.O.	GENERAL INSPECTION REQUIREMENTS							
II.O.1.					*			
II.O.2.					*			
II.O.3.					*			
II.P.	MANIFEST SYSTEM							
II.P.1						*	*	

CATEGORIES ARE DEFINED AS FOLLOWS:

A. Leased Land

B. North Slope and ALE

C. Interim Status TSD Units

D. Areas Between TSDs (excluding A and B)

E. TSD Unit Closures (in Part V)

F. TSD Operating Units (In Part III)

* Condition applies to this category, as modified by applicable footnotes and qualifiers

9513381.2635

HANFORD FACILITY WIDE PERMIT (REV. 2)

ATTACHMENT 4

PERMIT APPLICABILITY MATRIX

Updated August 28, 1995

CONDITION		CATEGORY						QUALIFIERS
PART	TITLE	A	B	C	D	E	F	
II.P.2.						*	*	
II.Q.	ON-SITE TRANSPORTATION							
II.Q.1.					*	*	*	
II.Q.2.					*	*	*	
II.R.	EQUIVALENT MATERIALS							
II.R.1.						*	*	
II.R.2.						*	*	
II.R.3.						*	*	
II.S.	LAND DISPOSAL RESTRICTIONS				*	*	*	
II.T.	ACCESS & INFORMATION				*	*	*	
II.U.	MAPPING OF UNDERGROUND PIPING							
II.U.1.				*		*	*	
II.U.2.				*		*	*	
II.U.3.				*		*	*	
II.U.4.				*		*	*	
II.V.	MARKING OF UNDERGROUND PIPING			*		*	*	
II.W.	OTHER PERMITS AND/OR APPROVALS							
II.W.1.						*	*	
II.W.2.						*	*	
II.W.3.						*	*	
II.X.	SCHEDULE EXTENSIONS							
II.X.1.				*	*	*	*	Condition II.X. only applies to Category C if activities are subject to Conditions II.U. and II.V.
II.X.2.				*	*	*	*	Condition II.X. only applies to Category D if activities are subject to this Permit as defined by this matrix.

CATEGORIES ARE DEFINED AS FOLLOWS:

A. Leased Land

B. North Slope and ALE

C. Interim Status TSD Units

D. Areas Between TSDs (excluding A and B)

E. TSD Unit Closures (in Part V)

F. TSD Operating Units (In Part III)

* Condition applies to this category, as modified by applicable footnotes and qualifiers

HANFORD FACILITY WIDE PERMIT (REV. 2)
ATTACHMENT 4
PERMIT APPLICABILITY MATRIX
Updated August 28, 1995

CONDITION		CATEGORY						QUALIFIERS
PART	TITLE	A	B	C	D	E	F	
PARTS III, IV, AND V								
III.	UNIT SPECIFIC CONDITIONS FOR FINAL STATUS OPERATIONS							
III.1.A.	616 NRDWSF COMPLIANCE WITH APPROVED PERMIT APPLICATION					*		
III.1.B.	AMENDMENTS TO THE APPROVED PERMIT APPLICATION					*		
III.2.A.	305-B COMPLIANCE WITH APPROVED PERMIT					*		
III.2.B.	AMENDMENTS TO THE APPROVED PERMIT APPLICATION					*		
IV.	CORRECTIVE ACTIONS FOR PAST PRACTICE	*	*		*			
V.	UNIT SPECIFIC CONDITIONS FOR UNITS UNDERGOING CLOSURE							
V.1.A.	183-H BASINS COMPLIANCE WITH APPROVED CLOSURE PLAN					*		
V.1.B.	AMENDMENTS TO THE APPROVED CLOSURE PLAN					*		
V.2.A.	300 ASE COMPLIANCE WITH APPROVED CLOSURE PLAN					*		
V.2.B.	AMENDMENTS TO THE APPROVED CLOSURE PLAN					*		
V.3.A.	2727-S COMPLIANCE WITH APPROVED CLOSURE PLAN					*		
V.3.B.	AMENDMENTS TO THE APPROVED CLOSURE PLAN					*		
V.4.A.	SHLWS COMPLIANCE WITH APPROVED CLOSURE PLAN					*		
V.4.B.	AMENDMENTS TO THE APPROVED CLOSURE PLAN					*		
V.5.A.	218 BPDS COMPLIANCE WITH APPROVED CLOSURE PLAN					*		
V.5.B.	AMENDMENTS TO THE APPROVED CLOSURE PLAN					*		
V.6.A.	200 APDS COMPLIANCE WITH APPROVED CLOSURE PLAN					*		
V.6.B.	AMENDMENTS TO APPROVED CLOSURE PLAN					*		

CATEGORIES ARE DEFINED AS FOLLOWS:

- | | |
|-----------------------------|---|
| A. Leased Land | D. Areas Between TSDs (excluding A and B) |
| B. North Slope and ALE | E. TSD Unit Closures (in Part V) |
| C. Interim Status TSD Units | F. TSD Operating Units (In Part III) |

* Condition applies to this category, as modified by applicable footnotes and qualifiers

9513381.2636

HANFORD FACILITY WIDE PERMIT (REV. 2)

ATTACHMENT 4

PERMIT APPLICABILITY MATRIX

Updated August 28, 1995

CONDITION		CATEGORY						QUALIFIERS
PART	TITLE	A	B	C	D	E	F	
V.7.A.	2101-M POND COMPLIANCE WITH APPROVED CLOSURE PLAN					*		
V.7.B.	AMENDMENTS TO APPROVED CLOSURE PLAN					*		
V.8.A.	B PONDS COMPLIANCE WITH APPROVED CLOSURE PLAN					*		
V.8.B.	AMENDMENTS TO APPROVED CLOSURE PLAN					*		
V.9.A.	HPADS COMPLIANCE WITH APPROVED CLOSURE PLAN					*		
V.9.B.	AMENDMENTS TO APPROVED CLOSURE PLAN					*		
V.10.A.	105-DR LARGE SODIUM FIRE FACILITY COMPLIANCE WITH APPROVED CLOSURE PLAN					*		
V.10.B.	AMENDMENTS TO APPROVED CLOSURE PLAN					*		
V.11.A.	304 CONCRETION FACILITY COMPLIANCE WITH APPROVED CLOSURE PLAN					*		
V.11.B.	AMENDMENTS TO APPROVED CLOSURE PLAN					*		

CATEGORIES ARE DEFINED AS FOLLOWS:

A. Leased Land

B. North Slope and ALE

C. Interim Status TSD Units

D. Areas Between TSDs (excluding A and B)

E. TSD Unit Closures (in Part V)

F. TSD Operating Units (In Part III)

* Condition applies to this category, as modified by applicable footnotes and qualifiers

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